Rec 10/5/99

PHILIP W. TOWLE
Air Pollution Control Officer
DONNA M. ROBERTS
Administrative Aide

306 East Gobbi Street
Ukiah, California
(707) 463-4354
Fax: (707) 463-5707

COUNTY OF MENDOCINO
AIR QUALITY MANAGEMENT DISTRICT
UKIAH, CALIFORNIA 95482

October 1, 1999

MS AIR-3 Attn: Nahid Zoueshtiagh
US EPA Region IX
75 Hawthorn Street
San Francisco 94105

Subject: Preliminary review of a Draft Title V permit

Dear Nahid;

Earlier this year we discussed the possibility of EPA Region 9 unofficially reviewing a Title V permit from our District. The purpose would be to iron out or get on the table any major issues before the District officially submitted a Permit and started the EPA review clock. I am very grateful to Region 9 for this offer, and now wish to take advantage of it. Enclosed is a draft Title V permit for the Georgia Pacific West Fort Bragg Sawmill. I have included a copy of their permit application, and a Draft Statement of Basis. This would be the same packagte that would be submitted for an official review.

I have already incorporated some of your comments dealing with streamlining in light of our earlier discussion. I must say that the documentation you forwarded on some of the issues was rather arcane. I have interpreted and applied it to the best of my ability, but am not sure yet that I fully understand (or agree with?) some of the reasoning. Hopefully, this will be a good education for both the District and Region 9, and will save much time down the road.

If you have any questions, please contact me at (707) 463-5706. After October 14, I will only be available by email for about two months. My email during that period will be <dwolbach@mindspring.com>.

Thank you again for your helpfulness on this issue.

Dean Wolbach

C. D. Wolbach, PhD, REA
Senior Air Quality Specialist
Mendocino County Air Quality Management District

Attachments: Georgia Pacific Western Fort Bragg revised permit application
Georgia Pacific Western Fort Bragg Facility draft Title V permit
Statement of Basis for Georgia Pacific Western Fort Bragg Facility draft Title V permit

Statement of Basis for conditions in Georgia Pacific Western Title V Permit (Application as amended April 1999).

The following items state the basis for engineering decisions made during the preparation of this permit, and present specific information that will be useful to a reviewer of this permit.

1. **Additional permitted equipment not included in the application**

   There is no permitted equipment at this facility that is not included in this permit.

2. **Insignificant activities or State-registered portable equipment**

   a. The facility has 15 operations/activities exempt as insignificant sources under District Engineering policy and procedures.

   b. The facility has 31 organic liquid storage vessels that are considered insignificant sources because the contained materials have vapor pressures less than 5mm Hg.

   c. The facility has multiple activities that are confined indoors, and considered insignificant activities.

   d. The facility has 9 out-door units or activities that are considered insignificant sources because engineering calculations show that individually their emissions of PM are less than 0.4 tons per year, and combined their emissions are less than 1.0 ton per year. (See attached calculations).

   e. Kilns and pre-dryers are steam heated. Therefor they are considered insignificant sources.

   f. There are no registered portable equipment items at this facility.

3. **Outdated SIP requirements streamlining demonstrations,**

   a. The District is not aware of any outdated SIP requirements that are in current permits. Because existing permit conditions are the only SIP conditions that have been incorporated, there should be no outdated requirements.

4. **Multiple applicable requirements streamlining demonstration**

   a. PM10 periodic monitoring requirements have been incorporated by requiring the affected unit(s) to meet total PM limits at the PM10 level.

   b. Federal and District PM monitoring requirements for the No. 3 Boiler have been combined by incorporating sub-measurements of the ARB Method 5 Sampling procedure to meet the EPA requirements. Specifically, the "front half" particulate (probe wash and filter catch) have been designated the compliance measurement for the EPA limit of 0.05 grains/dscf, and the total train catch for the District requirement of 0.10 grains/dscf. This is *more restrictive* than a single limit in that the unit must meet both limits simultaneously. (see below, "Other Issues")

   c. There is one NSR-PSD monitoring condition that has been dropped. Under the existing Permit to Construct there is a requirement to keep records on the flange-to-flange pressure drop across the wet scrubber on Boiler No. 3.

5. **Permit shields**

   There are no permit shields intended in this permit. However, the statement of periodic monitoring conditions may constitute a permit shield. That is, the *statement "compliance*

shall be determined by... " may act as a permit shield from presumptive non-compliance arising from other information. The EPA is asked to express an opinion on this.

6. Alternative operating scenarios

Chapter 4 §IV(C)(7)(b) - One alternative operating scenario is incorporated into this permit. The alternative operating scenario is the use of fuel oil in the boilers during emergencies. For Boiler No. 3, from the PSD review, this is limited to 438 hours per year, thus limiting annual NOx emissions from fuel oil combustion

7. Compliance schedules

The facility is currently in compliance with all District and Federal Air permits. There is no compliance schedule necessary or incorporated in the permit.

8. CAM requirements

a. No units at the facility use add-on control devices. Therefore, according to the EPA training manual, there are no CAM requirements.

"CAM is applicable to units at a Title V source that
- Are subject to an emission limit,
- *use add-on controls to meet the limit, and*
- have pre-control potential emissions equal to or greater than the major source threshold." (emphasis added)

See below for pre- (physical) control emissions potential.

9. Plant wide allowable emissions limits or other voluntary limits

a. Chapter 4 §IV(C)(7) – On previous permits for the No. 3 boiler the facility has accepted limits on steam production to maintain the unit below the NSPS trigger level of 250MM Btu/hr. Limits have been placed on daily average and annual average steam production, on the hours of fuel oil usage, and on the sulfur content of the fuel oil. These conditions have been carried over from the Federal Authority to Construct Permit. The conditions are:

- 140,000 lbs steam/day daily average
- 98,000 lbs steam/day annual average
- 438 hours/year fuel oil burning, and
- maximum 1.75% sulfur by weight in the fuel oil.

b. Chapter 4 §V(C) – Facility has voluntarily accepted permit conditions imposing Phase I and II vapor recovery on their gasoline dispensing equipment. This was done to decrease their benzene emissions under State AB2588 toxic emissions inventory reporting requirements.

10. District permits to operate or authority to construct permits

a. All pertinent conditions in all permits to operate and authorities to construct currently in force at this facility have been incorporated into this permit. All conditions in the EPA NSR/PSD permit for Boiler No. 3 have bben incorporated into this permit.

11. Periodic monitoring decisions

a. There are no periodic monitoring decisions in this permit contrary to those already in place. Additional monitoring requirements beyond those in current permits have been instituted.

- *List individual equipment additions with permit citation*

12. SIP gap issues

a. Chapter 1, Section XIV(H) Asbestos, may have a SIP gap issue. The District Reg 1, Rule 490 has been submitted for inclusion into the SIP, but has not been approved into the SIP.

13. Other Issues

a. Chapter 4, Sections IV(A)(5)(a)(i), (B)(5)(a)(i), and (C)(5)(a)(i) - A non-EPA particulate measurement method specified for use in this permit is California ARB Method 5. This Method has been approved into the California SIP.

b. Chapter 4, Sections I(A)(5)(a)(i), (B)(5)(a)(i), II(A)(5)(a)(i), (B)(5)(a)(i), III(A)(5)(a)(i), and IV(D)(5)(a)(i) - A non-EPA particulate measurement method specified for use in this permit is Oregon DEQ Method 8 (for cyclones). This Method has been approved into the Oregon SIP by inclusion in the Oregon Methods Manual.

c. There was a cooling tower permit at this facility. The District no longer issues permits for cooling towers. Under the State ATCM for cooling towers the District adopted Regulation 3, Rule 3 – Airborne Toxic control Measures for Hexavalent Chromium Emissions From Chromate Treated Cooling Towers. This regulation is prohibitory, banning the use of chromate based water treatment chemicals in cooling towers, and requiring testing for those wood cooling towers that used hexavalent chromium water treatment chemicals in the past until certain minimum levels have been reached. GPW has met all conditions of the Regulation for exemption.

d. The District, after review, has dropped the target boxes as permitted sources. These are 'in-line' knock-outs for large chips and wood particles as part of the process, are not a control device, and are an insignificant source of fugitive particulate emissions.

EXISTING PERMITS ARE IN APPLICATION

Georgia-Pacific Fort Bragg, CA Sawmill - Supporting Engineering Emissions Estimates

PROCESS DATA

Unit Name: Cut-off Saw - Mill (North)
Emission Unit No. : insignificant
Emission Point ID No. : insignificant

Process Operation:

Actual[a]:	6,240 hr/yr
Maximum Potential:	8,760 hr/yr

Process Throughputs [b]:

Actual:	60,474,450 BF/yr
Maximum Potential:	84,896,824 BF/yr

Emission Factors[c]:

PM:	1.0 lb/ton sawdust generated
PM_{10}:	0.36 lb/ton sawdust generated

EMISSIONS CALCULATIONS

Actual Emissions:

PM Emissions = [Actual Throughput (BF/yr) / Conversion Factor [d] (BF/ft)] / Average log length (ft/log) [d]
x No. of cuts per log [d] (cuts/log) x Sawdust generated per cut [e] (ft^3/cut) x wood density [f] (lb/ft^3)
/ 2,000 lbs/ton x Emission factor (lb/ton) / 2,000 lbs/ton

= 60,474,450 BF/yr / 1.300 BF/ft / 17 ft/log x
2.0 cuts/log x 0.047 ft^3/cut x 37 lb/ft^3 /
2,000 lbs/ton x 1.0 lb/ton / 2,000 lbs/ton

= 0.002 ton/yr

= 0.001 lb/hr

PM_{10} Emissions = [Actual Throughput (BF/yr) / Conversion Factor [d] (BF/ft)] / Average log length (ft/log) [d]
x No. of cuts per log [d] (cuts/log) x Sawdust generated per cut [e] (ft^3/cut) x wood density [f] (lb/ft^3)
/ 2,000 lbs/ton x Emission factor (lb/ton) / 2,000 lbs/ton

= 60,474,450 BF/yr / 1.300 BF/ft / 17 ft/log x
2.0 cuts/log x 0.047 ft^3/cut x 37 lb/ft^3 /
2,000 lbs/ton x 0.36 lb/ton / 2,000 lbs/ton

= 0.001 ton/yr

= 0.0003 lb/hr

Maximum Potential Emissions:

PM Emissions = [Maximum Throughput (BF/yr) / Conversion Factor [d] (BF/ft)] / Average log length (ft/log) [d]
x No. of cuts per log [d] (cuts/log) x Sawdust generated per cut [e] (ft^3/cut) x wood density [f] (lb/ft^3)
/ 2,000 lbs/ton x Emission factor (lb/ton) / 2,000 lbs/ton

= 84,896,824 BF/yr / 1.300 BF/ft / 17 ft/log x
3.0 cuts/log x 0.047 ft^3/cut x 37 lb/ft^3 /
2,000 lbs/ton x 1.0 lb/ton / 2,000 lbs/ton

= 0.005 ton/yr

= 0.001 lb/hr

PM_{10} Emissions = [Maximum Throughput (BF/yr) / Conversion Factor [d] (BF/ft)] / Average log length (ft/log) [d]
x No. of cuts per log [d] (cuts/log) x Sawdust generated per cut [e] (ft^3/cut) x wood density [f] (lb/ft^3)
/ 2,000 lbs/ton x Emission factor (lb/ton) / 2,000 lbs/ton

= 84,896,824 BF/yr / 1.300 BF/ft / 17 ft/log x
3.0 cuts/log x 0.047 ft^3/cut x 37 lb/ft^3 /
2,000 lbs/ton x 0.36 lb/ton / 2,000 lbs/ton

= 0.002 ton/yr

= 0.0004 lb/hr

EMISSIONS SUMMARY

Pollutant	Actual Emissions (lb/hr)	Actual Emissions (ton/yr)	Maximum Potential Emissions (lb/hr)[g]	Maximum Potential Emissions (ton/yr)
PM	0.001	0.002	0.001	0.005
PM_{10}	0.0003	0.001	0.0004	0.002

NOTES:

(a) Actual hours of operation are based on the Sawmill hours of operation for 1993 (120 hrs/wk, 52 wks/yr). The 120 hrs/week take into account 48 hrs/wk downtime.

(b) Cut-saw process throughput is based on 1993 actual log throughput to Sawmill. Maximum has been obtained by scaling up actual throughput by Sawmill production figures.

(c) Emission factor obtained from G-P Guidance Document and is based on mass balance and SCC.

(d) All factors and log assumptions were estimated from log deck reports provided by L. Lake. Actual number of cuts is 2/log; maximum number of cuts is 3/log (per L. Lake).

(e) Quantity of sawdust generated is based on average area of the log and the saw kerf width. Average area of logs in Sawmill #2 is0.76 ft^2, with average log diameters of 11.8 inches. Cut-saw kerf width is 0.75 inches. (values provided by L. Lake)

(Sawdust generated: 3.14 x (11.8/2 / 12)^2 x (0.75/12) = 0.76 ft^2/cut x 0.0625 ft = 0.047 ft^3/cut)

(f) Wood density based on data obtained from the CRC Handbook on densities of substances.

(g) Maximum hourly emissions based upon maximum annual/8760 hrs. but may be higher because this is a batch operation.

Georgia-Pacific Fort Bragg, CA Sawmill - Supporting Engineering Emissions Estimates

PROCESS DATA

Unit Name: Cut-off Saw - Mill (South)
Emission Unit No. : insignificant
Emission Point ID No. : insignificant

Process Operation:

Actual[a]: 6,240 hr/yr
Maximum Potential: 8,760 hr/yr

Process Throughputs [b]:

Actual: 52,226,070 BF/yr
Maximum Potential: 73,317,368 BF/yr

Emission Factors[c]:

PM: 1.0 lb/ton sawdust generated
PM_{10}: 0.36 lb/ton sawdust generated

EMISSIONS CALCULATIONS

Actual Emissions:

PM Emissions = [Actual Throughput (BF/yr) / Conversion Factor [d] (BF/ft)] / Average log length (ft/log) [d]
x No. of cuts per log [d] (cuts/log) x Sawdust generated per cut [e] (ft^3/cut) x wood density [f] (lb/ft^3)
/ 2,000 lbs/ton x Emission factor (lb/ton) / 2,000 lbs/ton

= 52,226,070 BF/yr / 1,300 BF/ft / 17 ft/log x
2.0 cuts/log x 0.047 ft^3/cut x 37 lb/ft^3 /
2,000 lbs/ton x 1.0 lb/ton / 2,000 lbs/ton
= 0.002 ton/yr
= 0.001 lb/hr

PM_{10} Emissions = [Actual Throughput (BF/yr) / Conversion Factor [d] (BF/ft)] / Average log length (ft/log) [d]
x No. of cuts per log [d] (cuts/log) x Sawdust generated per cut [e] (ft^3/cut) x wood density [f] (lb/ft^3)
/ 2,000 lbs/ton x Emission factor (lb/ton) / 2,000 lbs/ton

= 52,226,070 BF/yr / 1,300 BF/ft / 17 ft/log x
2.0 cuts/log x 0.047 ft^3/cut x 37 lb/ft^3 /
2,000 lbs/ton x 0.36 lb/ton / 2,000 lbs/ton
= 0.001 ton/yr
= 0.0002 lb/hr

Maximum Potential Emissions:

PM Emissions = [Maximum Throughput (BF/yr) / Conversion Factor [d] (BF/ft)] / Average log length (ft/log) [d]
x No. of cuts per log [d] (cuts/log) x Sawdust generated per cut [e] (ft^3/cut) x wood density [f] (lb/ft^3)
/ 2,000 lbs/ton x Emission factor (lb/ton) / 2,000 lbs/ton

= 73,317,368 BF/yr / 1,300 BF/ft / 17 ft/log x
3.0 cuts/log x 0.047 ft^3/cut x 37 lb/ft^3 /
2,000 lbs/ton x 1.0 lb/ton / 2,000 lbs/ton
= 0.004 ton/yr
= 0.001 lb/hr

PM_{10} Emissions = [Maximum Throughput (BF/yr) / Conversion Factor [d] (BF/ft)] / Average log length (ft/log) [d]
x No. of cuts per log [d] (cuts/log) x Sawdust generated per cut [e] (ft^3/cut) x wood density [f] (lb/ft^3)
/ 2,000 lbs/ton x Emission factor (lb/ton) / 2,000 lbs/ton

= 73,317,368 BF/yr / 1,300 BF/ft / 17 ft/log x
3.0 cuts/log x 0.047 ft^3/cut x 37 lb/ft^3 /
2,000 lbs/ton x 0.36 lb/ton / 2,000 lbs/ton
= 0.002 ton/yr
= 0.0004 lb/hr

EMISSIONS SUMMARY

Pollutant	Actual Emissions (lb/hr)	Actual Emissions (ton/yr)	Maximum Potential Emissions (lb/hr)[g]	Maximum Potential Emissions (ton/yr)
PM	0.001	0.002	0.001	0.004
PM_{10}	0.0002	0.001	0.0004	0.002

NOTES:

(a) Actual hours of operation are based on the Sawmill hours of operation for 1993 (120 hrs/wk, 52 wks/yr). The 120 hrs/week take into account 48 hrs/wk downtime.

(b) Cut-saw process throughput is based on 1993 actual log throughput to Sawmill. Maximum has been obtained by scaling up actual throughput by Sawmill production figures.

(c) Emission factor obtained from G-P Guidance Document and is based on mass balance and SCC.

(d) All factors and log assumptions were estimated from log deck reports provided by L. Lake. Actual number of cuts is 2/log: maximum number of cuts is 3/log (per L. Lake).

(e) Quantity of sawdust generated is based on average area of the log and the saw kerf width. Average area of logs in the Sawmill is0.76 ft^2, with average log diameters of 11.8 inches. Cut-saw kerf width is 0.75 inches. (values provided by L. Lake)

(Sawdust generated: $3.14 \times (11.8/2 / 12)^2 \times (0.75/12) = 0.76\ ft^2$/cut x $0.0625\ ft = 0.047\ ft^3$/cut)

(f) Wood density based on data obtained from the CRC Handbook on densities of substances.

(g) Maximum hourly emissions based upon maximum annual/8760 hrs, but may be higher because this is a batch operation.

Georgia-Pacific Fort Bragg, CA Sawmill - Supporting Engineering Emissions Estimates

PROCESS DATA

Unit Name: Mechanical Debarker - Mill (North)
Emission Unit No. : insignificant
Emission Point ID No. : insignificant

Process Operation:

Actual[a]: 6,240 hr/yr
Maximum Potential: 8,760 hr/yr

Process Throughputs [b]:

Actual: 60,474,450 BF/yr
Maximum Potential: 84,896,824 BF/yr

Emission Factors[c]:

PM: 0.024 lb/ton of log
PM_{10}: 0.011 lb/ton of log

EMISSIONS CALCULATIONS

Actual Emissions:

PM Emissions = [Actual Throughput (BF/yr) / Conversion Factor [d] (BF/ft) x Area of log[e] (ft^2)] x Wood density[f] (lb/ft^3) / 2,000 lb/ton x Emission factor (lb/ton) / 2,000 lb/ton

= 60,474,450 BF/yr / 1,300 BF/ft x 0.76 ft^2 x 37 lb/ft^3 / 2,000 lb/ton x 0.024 lb/ton / 2,000 lbs/ton

= 0.008 ton/yr

= 0.003 lb/hr

PM_{10} Emissions = [Actual Throughput (BF/yr) / Conversion Factor [d] (BF/ft) x Area of log[e] (ft^2)] x Wood density[f] (lb/ft^3) / 2,000 lb/ton x Emission factor (lb/ton) / 2,000 lb/ton

= 60,474,450 BF/yr / 1,300 BF/ft x 0.76 ft^2 x 37 lb/ft^3 / 2,000 lb/ton x 0.011 lb/ton / 2,000 lbs/ton

= 0.004 ton/yr

= 0.001 lb/hr

Maximum Potential Emissions:

PM Emissions = [Maximum Throughput (BF/yr) / Conversion Factor [d] (BF/ft) x Area of log[e] (ft^2)] x Wood density[f] (lb/ft^3) / 2,000 lb/ton x Emission factor (lb/ton) / 2,000 lb/ton

= 84,896,824 BF/yr / 1,300 BF/ft x 0.76 ft^2 x 37 lb/ft^3 / 2,000 lb/ton x 0.024 lb/ton / 2,000 lbs/ton

= 0.01 ton/yr

= 0.003 lb/hr

PM_{10} Emissions = [Maximum Throughput (BF/yr) / Conversion Factor [d] (BF/ft) x Area of log[e] (ft^2)] x Wood density[f] (lb/ft^3) / 2,000 lb/ton x Emission factor (lb/ton) / 2,000 lb/ton

= 84,896,824 BF/yr / 1,300 BF/ft x 0.76 ft^2 x 37 lb/ft^3 / 2,000 lb/ton x 0.011 lb/ton / 2,000 lbs/ton

= 0.005 ton/yr

= 0.001 lb/hr

EMISSIONS SUMMARY

Pollutant	Actual Emissions (lb/hr)	Actual Emissions (ton/yr)	Maximum Potential Emissions (lb/hr)[g]	Maximum Potential Emissions (ton/yr)
PM	0.003	0.008	0.003	0.01
PM_{10}	0.001	0.004	0.001	0.005

NOTES:

(a) Actual hours of operation are based on the Sawmill hours of operation for 1993 (120 hrs/wk, 52 wks/yr). The 120 hrs/week take into account 48 hrs/wk downtime.
(b) Process throughput based on 1993 log throughput for the Sawmill. Maximum has been obtained by scaling up actual throughput by Sawmill 1993 production figures.
(c) Emission factors obtained from GP Guidance Document. (Basis: AP-42 and SCC)
(d) Conversion factor (average value) obtained from data summarized in the "Log Deck Activity Report from 1/93 to 3/94 (provided by L. Lake).
(e) Average area for logs in the Sawmill is 0.76 ft^2 with average log diameters of 11.8 inches.
(f) Wood density based on data obtained form the CRC Handbook.
(g) Maximum hourly emissions based upon maximum annual/8760 hrs. but may be higher because this is a batch operation.

Georgia-Pacific Fort Bragg, CA Sawmill - Supporting Engineering Emissions Estimates

PROCESS DATA

Unit Name: Mechanical Debarker - Mill (South)
Emission Unit No. : insignificant
Emission Point ID No. : insignificant

Process Operation:

Actual[a]:	6,240 hr/yr
Maximum Potential:	8,760 hr/yr

Process Throughputs [b]:

Actual:	52,226,070 BF/yr
Maximum Potential:	73,317,368 BF/yr

Emission Factors[c]:

PM:	0.024 lb/ton of log
PM_{10}:	0.011 lb/ton of log

EMISSIONS CALCULATIONS

Actual Emissions:

PM Emissions = [Actual Throughput (BF/yr) / Conversion Factor[d] (BF/ft) x Area of log[e] (ft^2)] x Wood density[f] (lb/ft^3) / 2,000 lb/ton x Emission factor (lb/ton) / 2,000 lb/ton

= 52,226,070 BF/yr / 1.300 BF/ft x 0.76 ft^2 x 37 lb/ft^3 / 2,000 lb/ton x 0.024 lb/ton / 2,000 lbs/ton

= 0.007 ton/yr

= 0.002 lb/hr

PM_{10} Emissions = [Actual Throughput (BF/yr) / Conversion Factor[d] (BF/ft) x Area of log[e] (ft^2)] x Wood density[f] (lb/ft^3) / 2,000 lb/ton x Emission factor (lb/ton) / 2,000 lb/ton

= 52,226,070 BF/yr / 1.300 BF/ft x 0.76 ft^2 x 37 lb/ft^3 / 2,000 lb/ton x 0.011 lb/ton / 2,000 lbs/ton

= 0.003 ton/yr

= 0.001 lb/hr

Maximum Potential Emissions:

PM Emissions = [Maximum Throughput (BF/yr) / Conversion Factor[d] (BF/ft) x Area of log[e] (ft^2)] x Wood density[f] (lb/ft^3) / 2,000 lb/ton x Emission factor (lb/ton) / 2,000 lb/ton

= 73,317,368 BF/yr / 1.300 BF/ft x 0.76 ft^2 x 37 lb/ft^3 / 2,000 lb/ton x 0.024 lb/ton / 2,000 lbs/ton

= 0.01 ton/yr

= 0.002 lb/hr

PM_{10} Emissions = [Maximum Throughput (BF/yr) / Conversion Factor[d] (BF/ft) x Area of log[e] (ft^2)] x Wood density[f] (lb/ft^3) / 2,000 lb/ton x Emission factor (lb/ton) / 2,000 lb/ton

= 73,317,368 BF/yr / 1.300 BF/ft x 0.76 ft^2 x 37 lb/ft^3 / 2,000 lb/ton x 0.011 lb/ton / 2,000 lbs/ton

= 0.004 ton/yr

= 0.001 lb/hr

EMISSIONS SUMMARY

Pollutant	Actual Emissions (lb/hr)	Actual Emissions (ton/yr)	Maximum Potential Emissions (lb/hr)[g]	Maximum Potential Emissions (ton/yr)
PM	0.002	0.007	0.002	0.01
PM_{10}	0.001	0.003	0.001	0.004

NOTES:

(a) Actual hours of operation are based on the Sawmill hours of operation (120 hrs/wk, 52 wks/yr). The 120 hrs/week take into account 48 hrs/wk downtime.
(b) Process throughput based on 1993 log throughput for the Sawmill. Maximum has been obtained by scaling up actual throughput by the Sawmill 1993 production figures.
(c) Emission factors obtained from GP Guidance Document. (Basis: AP-42 and SCC)
(d) Conversion factor (average value) obtained from data summarized in the "Log Deck Activity Report from 1/93 to 3/94 (provided by L. Lake).
(e) Average area for logs in the Sawmill is 0.76 ft^2 with average log diameters of 11.8 inches.
(f) Wood density based on data obtained form the CRC Handbook.
(g) Maximum hourly emissions based upon maximum annual/8760 hrs, but may be higher because this is a batch operation.

PROCESS DATA

Unit Name: Chipper - Planer
Emission Unit No. : insignificant
Emission Point ID No. : insignificant

Process Operation:

Actual[a]: 4,160 hr/yr
Maximum Potential: 8,760 hr/yr

Process Throughputs [b]:

Actual: 1,793 tons/yr
Maximum Potential: 3,776 tons/yr

Emission Factors[c]:

PM: 0.024 lb/ton of material
PM_{10}: 0.011 lb/ton of material

EMISSIONS CALCULATIONS

Actual Emissions:

PM Emissions = [Actual chips/sawdust produced (ton/yr) x Emission factor (lb/ton)] / 2,000 lb/ton
= 1,793 ton/yr x 0.024 lb/ton / 2,000 lb/ton
= 0.02 ton/yr
= 0.01 lb/hr

PM_{10} Emissions = [Actual chips/sawdust produced (ton/yr) x Emission factor (lb/ton)] / 2,000 lb/ton
= 1,793 ton/yr x 0.011 lb/ton / 2,000 lb/ton
= 0.01 ton/yr
= 0.005 lb/hr

Maximum Potential Emissions:

PM Emissions = [Maximum chips/sawdust produced (ton/yr) x Emission factor (lb/ton)] / 2,000 lb/ton
= 3,776 ton/yr x 0.024 lb/ton / 2,000 lb/ton
= 0.05 ton/yr
= 0.01 lb/hr

PM_{10} Emissions = [Maximum chips/sawdust produced (ton/yr) x Emission factor (lb/ton)] / 2,000 lb/ton
= 3,776 ton/yr x 0.011 lb/ton / 2,000 lb/ton
= 0.02 ton/yr
= 0.005 lb/hr

EMISSIONS SUMMARY

Pollutant	Actual Emissions (lb/hr)	Actual Emissions (ton/yr)	Maximum Potential Emissions (lb/hr)[d]	Maximum Potential Emissions (ton/yr)
PM	0.010	0.022	0.010	0.045
PM_{10}	0.005	0.010	0.005	0.021

NOTES:

(a) Actual hours of operation are based on the Planer hours of operation for 1993 (8 hrs/day, 5 days/wk, 52 wks/yr, 2-shifts).
(b) Process throughput is based on the amount of chips sold in 1993 plus an additional 2% of chips diverted to the fuel area and 10% sawdust generated at the chipper. Maximum has been obtained by scaling up actual by 1993 Planer production figures.
(c) Emission factors obtained from G-P Guidance Document. (Basis: AP-42 and SCC)
(d) Maximum hourly emissions based upon maximum annual/8760 hrs. but may be higher because this is a batch operation.

PROCESS DATA

Unit Name: Chip Collection Bin - Planer (Unloading)
Emission Unit No. : insignificant
Emission Point ID No. : insignificant

Process Operation:

Actual[a]: 4,160 hr/yr
Maximum Potential: 8,760 hr/yr

Process Throughputs [b]:

Actual: 1,598 ton/yr
Maximum Potential: 3,365 ton/yr

Emission Factors[c]:

PM: 0.048 lb/ton of material
PM_{10}: 0.022 lb/ton of material

EMISSIONS CALCULATIONS

Actual Emissions:

PM Emissions = [Actual chips sold (ton/yr) x Emission Factor (lb/ton)] / 2,000 lbs/ton
= 1,598 ton/yr x 0.048 lb/ton / 2,000 lbs/ton
= 0.04 ton/yr
= 0.02 lb/hr

PM_{10} Emissions = [Actual chips sold (ton/yr) x Emission Factor (lb/ton)] / 2,000 lbs/ton
= 1,598 ton/yr x 0.022 lb/ton / 2,000 lbs/ton
= 0.02 ton/yr
= 0.01 lb/hr

Maximum Potential Emissions:

PM Emissions = [Maximum Throughput (ton/yr) x Emission Factor (lb/ton)] / 2,000 lbs/ton
= 3,365 ton/yr x 0.048 lb/ton / 2,000 lbs/ton
= 0.08 ton/yr
= 0.02 lb/hr

PM_{10} Emissions = [Maximum Throughput (ton/yr) x Emission Factor (lb/ton)] / 2,000 lbs/ton
= 3,365 ton/yr x 0.022 lb/ton / 2,000 lbs/ton
= 0.04 ton/yr
= 0.01 lb/hr

EMISSIONS SUMMARY

Pollutant	Actual Emissions (lb/hr)	Actual Emissions (ton/yr)	Maximum Potential Emissions (lb/hr)[d]	Maximum Potential Emissions (ton/yr)
PM	0.02	0.04	0.02	0.08
PM_{10}	0.01	0.02	0.01	0.04

NOTES:

(a) Actual hours of operation are based on Planer hours of operation for 1993 (8 hrs/day, 5 days/wk, 52 wks/yr, 2-shifts).
(b) Actual throughput is based on the quantity of chips sold in 1993 from the bin located in Planer. Maximum throughput has been obtained by scaling up actual throughput by 1993 production values for the Planer. (provided by B. Eagleton to L. Lake)
(c) Emission factors obtained form G-P Guidance Document for bin unloading of large-size material such as shavings, chips, etc. (All bin loading operations are pnuematically conveyed to the bins.)
(d) Maximum hourly emissions based upon maximum annual/8760 hrs, but may be higher because this is a batch operation.

Georgia-Pacific Fort Bragg, CA Sawmill - Supporting Engineering Emissions Estimates

PROCESS DATA

Unit Name: Woodwaste Storage - Beach Area (outside)
Emission Unit No. : insignificant
Emission Point ID No. : insignificant

Process Operation [a]:	Sawmill #2	Planer #2
Actual (hrs/yr):	6,240	4,160
Maximum Potential (hrs/yr):	8,760	8,760
Actual Process Production (BF/yr):	171,641,085	91,062,918

Process Throughputs :

Sawmill #2 Sawdust Transfers

Actual: [Actual fuel transfered[b] (BDU/yr) x Conversion Factor-green[c] (lb/BDU) / 2,000 lb/ton]
= 2,093 BDU/yr x 4.800 lb/BDU / 2,000 lb/ton
= 5,023 ton/yr

Maximum: 7,052 ton/yr

Deck Area Bark[d]

Actual: [Sawmill #1 Transfers (ton/yr) + Sawmill #2 Transfers (ton/yr)] x % Bark to Fuel (%) / 100
= (tons/yr + 5,023 tons/yr) 5 % / 100
= 251 ton/yr

Maximum: 353 ton/yr

Planer Shavings[d]

Actual: Total shavings sold (ton/yr) x % shavings to fuel / 100
= 11,096 tons/yr x 1 % / 100
= 111 ton/yr

Maximum: 234 ton/yr

Chips from Chippers[d]

Actual: Total chips sold (ton/yr) x % chips to fuel / 100
= 109,970 tons/yr x 2 % / 100
= 2,199 ton/yr

Maximum: 3,623 ton/yr

Planer Sawdust[d]

Actual: Total shavings sold (ton/yr) x % planer sawdust to fuel (%) / 100
11,096 tons/yr x 1.0 % / 100
= 111 ton/yr

Maximum: 234 ton/yr

Total Material Transfered:
(for fuel)

Actual: 7,696 ton/yr
Maximum: 11,494 ton/yr

Emission Factors[e]:

PM: 0.020 lb/ton of material
PM_{10}: 0.011 lb/ton of material

% Transfered to Beach Area: 80 %

Georgia-Pacific Fort Bragg, CA Sawmill - Supporting Engineering Emissions Estimates

EMISSIONS CALCULATIONS

Actual Emissions:

PM Emissions = Total actual transfers (ton/yr) x % Transfered to fuel (%) x Emission Factor (lb/ton) / 2,000 lb/ton

= 7,696 ton/yr x 80 % / 100 x 0.020 lb/ton /
2,000 lb/yr

= 0.06 ton/yr

PM_{10} Emissions = Total actual transfers (ton/yr) x % Transfered to fuel (%) x Emission Factor (lb/ton) / 2,000 lb/ton

= 7,696 ton/yr x 80 % / 100 x 0.011 lb/ton /
2,000 lb/yr

= 0.03 ton/yr

Maximum Potential Emissions:

PM Emissions = Total maximum transfers (ton/yr) x % Transfered to fuel (%) x Emission Factor (lb/ton) / 2,000 lb/ton

11,494 ton/yr x 80 % / 100 x 0.020 lb/ton /
2,000 lb/yr

0.09 ton/yr

PM_{10} Emissions = Total maximum transfers (ton/yr) x % Transfered to fuel (%) x Emission Factor (lb/ton) / 2,000 lb/ton

11,494 ton/yr x 80 % / 100 x 0.011 lb/ton /
2,000 lb/yr

0.05 ton/yr

EMISSIONS SUMMARY

Pollutant	Actual Emissions (lb/hr)	Actual Emissions (ton/yr)	Maximum Potential Emissions (lb/hr)	Maximum Potential Emissions (ton/yr)
PM	NA	0.06	NA	0.09
PM_{10}	NA	0.03	NA	0.05

NOTES:

(a) Process operation is based on the processes that feed the storage pile areas. All information obtained from production report for 1993 (per L. Lake.) report for 1993 (provided by B. Eagleton to L. Lake).
(b) Fuel transfers from the sawmill are based on production reports for 1993 (provided by B. Eagleton to L. Lake).
(c) Conversion factor based on 2,400 lb/BDU. At 50% moisture content, the factor becomes 4,800 lb/BDU (provided by L. Lake).
(d) Material estimating approaches provided by L. Lake. All percentages obtained from L. Lake. Where possible, maximums were obtained by scaling up actuals by the process production figures.
(e) Collection efficiencies based on dry end sawdust material handling. (Source : G-P Guidance Document AP-42 / and engineering judgement.

Georgia-Pacific Fort Bragg, CA Sawmill - Supporting Engineering Emissions Estimates

PROCESS DATA

Unit Name: Woodwaste Storage - Fuel House (inside)
Emission Unit No. : insignificant
Emission Point ID No. : insignificant

Process Operation [a]:	Sawmill	Planer
Actual (hrs/yr):	6,240	4,160
Maximum Potential (hrs/yr):	8,760	8,760
Actual Process Production (BF/yr):	171,641,085	91,062,918

Process Throughputs :

Sawmill Sawdust Transfers

Actual: [Actual fuel transfered[b] (BDU/yr) x Conversion Factor-green[c] (lb/BDU) / 2,000 lb/ton]
= 2,093 BDU/yr x 4,800 lb/BDU / 2,000 lb/ton
= 5,023 ton/yr

Maximum: 7,052 ton/yr

Planer Shavings[d]

Actual: Total shavings sold (ton/yr) x % shavings to fuel / 100
= 11,096 tons/yr x 1 % / 100
= 111 ton/yr

Maximum: 234 ton/yr

Chips from Chippers[d]

Actual: Total chips sold (ton/yr) x % chips to fuel / 100
= 109,970 tons/yr x 2 % / 100
= 2,199 ton/yr

Maximum: 3,623 ton/yr

Planer Sawdust[d]

Actual: Total shavings sold (ton/yr) x % planer sawdust to fuel (%) / 100
11,096 tons/yr x 1.0 % / 100
= 111 ton/yr

Maximum: 234 ton/yr

Total Material Transfered:
(for fuel)

Actual: 7,445 ton/yr
Maximum: 11,142 ton/yr

Emission Factors[c]:

PM: 0.020 lb/ton of material
PM_{10}: 0.011 lb/ton of material

% Transfered to Fuel House: 20 %

EMISSIONS CALCULATIONS

Actual Emissions:

PM Emissions = Total actual transfers (ton/yr) x % Transfered to fuel (%) x Emission Factor (lb/ton) / 2,000 lb/ton
= 7,445 ton/yr x 20 % / 100 x 0.020 lb/ton /
2,000 lb/yr
= 0.01 ton/yr

PM_{10} Emissions = Total actual transfers (ton/yr) x % Transfered to fuel (%) x Emission Factor (lb/ton) / 2,000 lb/ton
= 7,445 ton/yr x 20 % / 100 x 0.011 lb/ton /
2,000 lb/yr
= 0.01 ton/yr

Georgia-Pacific Fort Bragg, CA Sawmill - Supporting Engineering Emissions Estimates

Maximum Potential Emissions:

PM Emissions = Total maximum transfers (ton/yr) x % Transfered to fuel (%) x Emission Factor (lb/ton) / 2,000 lb/ton

11,142 ton/yr x 20 % / 100 x 0.020 lb/ton /
2,000 lb/yr
0.02 ton/yr

PM_{10} Emissions = Total maximum transfers (ton/yr) x % Transfered to fuel (%) x Emission Factor (lb/ton) / 2,000 lb/ton

11,142 ton/yr x 20 % / 100 x 0.011 lb/ton /
2,000 lb/yr
0.01 ton/yr

EMISSIONS SUMMARY

Pollutant	Actual Emissions (lb/hr)	Actual Emissions (ton/yr)	Maximum Potential Emissions (lb/hr)	Maximum Potential Emissions (ton/yr)
PM	NA	0.01	NA	0.02
PM_{10}	NA	0.01	NA	0.01

NOTES:

(a) Process operation is based on the processes that feed the storage pile areas. All information obtained from production report for 1993 (provided by B. Eagleton to L. Lake).
(b) Fuel transfers from the sawmill are based on production reports for 1993 (provided by B. Eagleton to L. Lake).
(c) Conversion factor based on 2,400 lb/BDU. At 50% moisture content, the factor becomes 4,800 lb/BDU (provided by L. Lake).
(d) Material estimating approaches provided by L. Lake. All percentages obtained from L. Lake. Where possible, maximums were obtained by scaling up actuals by the process production figures.
(e) Collection efficiencies based on dry end sawdust material handling. (Source : G-P Guidance Document AP-42 / and engineering judgement.

Georgia-Pacific Fort Bragg, CA Sawmill - Supporting Engineering Emissions Estimates

PROCESS DATA

Unit Name: Truck Dump - Power Boilers (Unloading)
Emission Unit No. : insignificant
Emission Point ID No. : insignificant

Process Operation:

Actual[a]: 6,240 hr/yr
Maximum Potential: 8,760 hr/yr

Process Throughputs [b]:

Actual: 22,540 ton/yr = 1127 loads/yr x 20 tons/load (1995)
Maximum Potential: 31,643 ton/yr

Emission Factors[c]:

PM: 0.02 lb/ton of material
PM_{10}: 0.01 lb/ton of material

EMISSIONS CALCULATIONS

Actual Emissions:

PM Emissions = [Actual hog fuel purchased (ton/yr) x Emission Factor (lb/ton)] / 2,000 lbs/ton
= 22,540 ton/yr x 0.020 lb/ton / 2,000 lbs/ton
= 0.23 ton/yr
= 0.07 lb/hr

PM_{10} Emissions = [Actual hog fuel purchased (ton/yr) x Emission Factor (lb/ton)] / 2,000 lbs/ton
= 22,540 ton/yr x 0.010 lb/ton / 2,000 lbs/ton
= 0.11 ton/yr
= 0.04 lb/hr

Maximum Potential Emissions:

PM Emissions = [Maximum Throughput (ton/yr) x Emission Factor (lb/ton)] / 2,000 lbs/ton
= 31,643 ton/yr x 0.020 lb/ton / 2,000 lbs/ton
= 0.32 ton/yr
= 0.07 lb/hr

PM_{10} Emissions = [Maximum Throughput (ton/yr) x Emission Factor (lb/ton)] / 2,000 lbs/ton
= 31,643 ton/yr x 0.010 lb/ton / 2,000 lbs/ton
= 0.16 ton/yr
= 0.04 lb/hr

EMISSIONS SUMMARY

Pollutant	Actual Emissions (lb/hr)	Actual Emissions (ton/yr)	Maximum Potential Emissions (lb/hr)[d]	Maximum Potential Emissions (ton/yr)
PM	0.07	0.23	0.07	0.32
PM_{10}	0.04	0.11	0.04	0.16

NOTES:

(a) Actual hours of operation are estimated based on Sawmill hours of operation.
(b) Actual throughput is based on the loads of hog fuel purchased in 1995. Maximum throughput has been obtained by scaling up actual operation hours by maximum hours (8760 hrs/yr).
(c) Emission factors obtained form G-P Guidance Document for bin unloading of large-size material such as shavings, chips, etc.
(d) Maximum hourly emissions were calculated by dividing maximum annual emissions by 8760 hours. Actual maximum hourly emissions may be higher because this is a batch operation and is dependant upon type and amount of material throughput for each batch.

Cover Page

County of Mendocino
Air Quality Management District
Ukiah, California 95482

Permit to Operate

is Hereby Granted to

Georgia Pacific West, Inc.

for Equipment Located at:

90 West Redwood Avenue
Fort Bragg, California

Subject to the Listed Conditions

Issue Date: Permit No.

Valid Through:

Philip Towle
Air Pollution Control Officer

Date

General Information

Note that those items marked **{District}** contain conditions that either do not have Federal equivalents, or have Federal equivalents but contain different conditions (e.g. particulate testing using California State Method 5 vs. using EPA Method 5). However, all permit conditions are Federally enforceable because all conditions derive from existing permit conditions originally instituted under the District SIP approved permit program or from Federal requirements.

Table of Contents

Figures

List of Abbreviations

Acronym	Definition
H&SC	California State Health and Safety Code
MCAQMD	Mendocino County Air Quality Management District
Auth.	Regulatory authority for a given permit condition
40 CFR	Title 40, Code of Federal Regulations
APCO	Air Pollution Control Officer
USEPA	United States Environmental Protection Agency
CEM	Continuous Emissions Monitor

Chapter 1 - General Provisions

I. GENERAL PERMIT CONDITIONS

A. All equipment, facilities and systems installed or used to achieve compliance with the terms and conditions of this Permit to Operate shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions.

[Auth. §**I**(B): 40 CFR 70.[redacted]; MCAQMD Regulation 1, Rule 240(d)(1)]

B. In the event of any violation of District Rules and Regulations, PERMITTEE shall follow-up with appropriate notification and take action to end such violation.

[Auth. §**I**(B): 40 CFR 70.[redacted]; MCAQMD Regulation 1, Rule 240(e)(6)]

C. The exceedance of any limiting condition is prohibited without prior application for, and the subsequent granting of, an Authority to Construct permit and, if necessary, a Prevention of Significant Deterioration (PSD) Permit.

[Auth. §**I**(C): 40 CFR 70.[redacted]; MCAQMD Regulation 1, Rule 200(a)]

II PERMIT TERM

This permit shall be valid for 5 years from the date of issuance.

[Auth. §**II**: 40 CFR 70.6(a)(2); MCAQMD Regulation 5, Rule 5.660]

III COMPLIANCE WITH PERMIT CONDITIONS

A. PERMITTEE shall comply with all permit conditions. The non-compliance with any permit condition is grounds for permit termination, revocation and re-issuance, modification, enforcement action, or denial of permit renewal.
[Auth. §**III**(A): 40 CFR 70.6(a)(6)(i); MCAQMD Regulation 5, Rule 5.610(g)(1)]

B. This permit does not convey property rights or exclusive privilege of any sort.
[Auth. §**III**(B): 40 CFR 70.6(a)(6)(iv); MCAQMD Regulation 5, Rule 5.610(g)(2)]

C. PERMITTEE shall not use the "need to hold or reduce a permitted activity in order to maintain compliance" as a defense for non-compliance with any permit condition.
[Auth. §**III**(C): 40 CFR 70.6(a)(6)(ii); MCAQMD Regulation 5, Rule 5.610(g)(4)]

D. A pending permit action or notification of anticipated noncompliance does not stay any permit condition.

[Auth. §**III**(D): MCAQMD Regulation 5, Rule 5.610(g)(5)]

E. Within a reasonable time period, PERMITTEE shall furnish any information requested by the air pollution control officer (APCO) of Mendocino County Air Quality Management District, in writing, for the purpose of determining: 1) compliance with the permit, or 2) whether or not cause exists for a permit or enforcement action.

[Auth. §**III**(E): 40 CFR 70.6(a)(6)(v)]

IV FEE PAYMENT

A. Permit fees shall be paid in five equal installments, one due each year on the anniversary of the permit issuance. The first installment is due upon issuance of the permit.

B. The permit fee for this permit shall be [redacted]

[Auth. §**IV**: Federal 40 CFR 70.6(a)(7); MCAQMD Regulation 5, Rule 5.670]

V INSPECTION AND ENTRY

PERMITEE shall allow the Air Pollution Control Officer, the Chairman of the California Air Resources Board, the Regional Administrator of the United States Environmental Protection Agency, and/or their authorized representatives, upon presentation of credentials, to do any of the following:

A. To enter upon the premises where the source is located, or in which any records are required to be kept under the terms and conditions of this permit; and

B. At reasonable times, to have access to and copy any records necessary for the determination of emissions of pollutants to the air or required to be kept under the terms and conditions of this permit; and

C. To inspect any equipment, operation, or subject in this permit; and

D. To sample emissions from this source.

[Auth. §**V**: Federal 40 CFR 70.6(c)(2), MCAQMD Regulation 5, Rule 5.610(e)]

VI UPSETS AND BREAKDOWNS

A. PERMITTEE shall notify the district by telephone within one hour of any failure of air pollution control equipment, process equipment, or of any abnormal operation which results in an increase in emissions above the allowable limits stated in the Permit Units Section of this permit.

B. PERMITTEE shall report upsets and breakdowns to the District in accordance with Regulation 5, Rule 5.450 of the District.

[Auth. §**VI**: Federal 40 CFR 70.6(a)(3)(iii)(B); MCAQMD Regulation 5, Rule 5.450]

VII CERTIFICATION OF COMPLIANCE

A. Compliance Certification

1. PERMITTEE shall submit compliance certification reports to the District for each calendar year. This report shall be submitted within 60 days of the end of each calendar year. The certification shall include:
   a. Identification of each term or condition of the permit that is the basis of the certification,
   b. compliance status,
   c. the method used for determining compliance, and

d. whether the compliance monitoring method is a continuous method or an intermittent method.

[Auth. §**VII**(A)(1): Federal 40 CFR 70.6(c)(5)]

2. PERMITTEE shall use District approved forms for the compliance certification and shall also include a written statement from the responsible official which certifies the truth, accuracy, and completeness of the report.

[Auth. §**VII**(A)(2): Federal 40 CFR 70.6(b)(5); MCAQMD Regulation 5, Rule 5.650]

3. A copy of each compliance certification shall be submitted to the Administrator, USEPA Region 9. The submittal address is:

USEPA Region 9
Air Division (AIR-3)
75 Hawthorne Street
San Francisco, CA 94105-3901

[Auth. §**VII**(A)(3): Federal 40 CFR 70.6(c)(5)(iv)]

B. Compliance Plan

1. PERMITTEE will continue to comply with those permit conditions with which it is in compliance.

[Auth. §**VII**(B)(1): Federal 40 CFR 70.5(c)(8)(iii)(A)]

2. PERMITTEE shall comply with all federally enforceable requirements that become applicable during the permit term, in a timely manner.

[Auth. §**VII**(B)(2): Federal 40 CFR 70.6(c); MCAQMD Regulation 5, Rule 5.630]

VIII RECORDKEEPING AND REPORTING

A. Log books

1. Separate logbooks or other records shall be kept on site and contain the information required and described in each equipment subsection (6) under Section **IV** – Equipment Specific Permit Conditions.

[Auth. §**VIII**(A)(1): MCAQMD Regulation 5, Rule 5.455(c)]

2. PERMITTEE will maintain a record of all required monitoring. The record shall include:

a. The date, place, and time of sampling or measurement,

b. The date the analyses were performed,

c. The company that performed the analyses

d. The analytical techniques or methods used

e. The results of such analyses, and

f. The operating conditions existing at the time of sampling or measurement.

[Auth. §**VIII**(A)(2): Federal 40 CFR 70.6(a)(3)(ii)(A)]

3. The recorded information shall be retained for at least five years from date of initial entry, and shall be made available to the District's inspector upon request.

[Auth. §**VIII**(A)(3): Federal 40 CFR 70.6(a)(3)(ii)(B)]

B. CEM Recordkeeping Requirements

The following information shall be retained for at least five years from date of initial entry and shall be made available to the District's inspector upon request.

1. Information on CEM operation including all emissions measurements and CEM evaluations,
2. All CEM systems or monitoring device calibration checks
3. Adjustments and maintenance performed on these systems or devices
4. Performance and all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection.
5. For each measurement, the following information should be included:
   a. Date, place, and time of measurement or maintenance,
   b. operating conditions at the time of measurements or maintenance,
   c. date, place, name of company or entity that performed the analyses and method of analysis; and
   d. results of the analyses.

[Auth. §**VIII**(B): Federal 40 CFR 71.6(3)(ii), MCAQMD Regulation 1, Rule 240(e)]

C. Excess Emissions

1. PERMITTEE shall notify the District of any upset conditions, breakdown, scheduled maintenance or any changes in operation or process which causes a violation of emission limitations prescribed by this permit, by District Rules and Regulations, or by State law, or which involves the operability of in-stack monitoring equipment. Notice shall be given as soon as reasonably possible but no later than two (2) hours after its detection during normal business hours. The completion of corrective measures or the shut down of emitting equipment is required within 48 hours of the occurrence of a breakdown condition (96 hours for in-stack monitoring equipment).
2. Not withstanding **VI**(B), PERMITTEE shall submit a written report of all excess emissions to the APCO for every calendar quarter. Each report shall be submitted within 30 days of the end of each calendar quarter and include the following:
   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.
   b. Specific identification of each period of excess emissions that occurs during startup, shutdown, and malfunctions of the boiler systems. The nature and

cause of any malfunction (or probable cause of the malfunction, if unknown) and the corrective action taken or preventative measures adopted shall also be reported.

c. The date and time identifying each period during which the continuous monitoring system was inoperative, repaired or adjusted. Such information shall be stated in the report.

d. When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report.

e. Excess emissions shall be defined as those exceeding the limits established in the Permit Units Section of this Permit.

[Auth §**VIII**(C): Federal 40 CFR 70.6(a)(6)(v), MCAQMD Regulation 5, Rule 5.610(g)(6)]

D. Deviation from permit requirements

1. PERMITTEE shall report any deviation from requirements in this Permit to Operate, other than deviations related to excess emissions, to the APCO within 24 hours.

2. PERMITTEE shall submit a written monitoring report which summaries CEM monitoring data for the reporting period and reports all deviations from permit requirements, including deviations attributable to upset conditions, to the APCO every six months. The reporting period shall be every six months. These reports shall be submitted within 30 days of the end of each reporting period.

   PERMITTEE shall use District approved forms for the report regarding deviation from permit requirements and shall also include a written statement from the responsible official which certifies the truth, accuracy, and completeness of the report. When no deviations have occurred for the quarter, such information shall be stated in the report.

   [Auth. §**VIII**(D): 40 CFR 70.6(a)(3)(iii); MCAQMD Regulation 5, Rule 5.625]

IX TRANSFER OF OWNERSHIP {District}

This permit is not transferable. In the event of any change in control or ownership of the facilities operated pursuant to this permit, the permit shall be deemed null and void, and PERMITEE shall surrender it to the District. PERMITEE shall notify the succeeding owner/operator of the existence of this permit and its conditions by letter, a copy of which shall be sent to the Air Pollution Control Officer. (The new owner/operator will be responsible to arrange for re-issuance of this permit in his/her name.)

[Auth. §**IX**: MCAQMD Regulation 1, Rule 240(j)]

X REOPENING FOR CAUSE

A. This permit may be modified, revoked, reopened, or terminated for cause.

[Auth. §**X**(A): 40 CFR 70.7(f)(2); MCAQMD Regulation 5, Rule 5.570(a)]

B. This permit shall be reopened and revised if:

1. Additional requirements become applicable, and more than three years remain on the term of the permit.
2. Additional acid rain requirements become applicable to the source.
3. The permit contains a material mistake or inaccurate statements were made in establishing terms or conditions of the permit.
4. The permit must be revised or revoked to assure compliance with applicable requirements.

[Auth. §**X**(B): 40 CFR 70.7(f)(1); MCAQMD Regulation 5, Rule 5.570(b)]

C. Filing of a request for permit action by PERMITTEE does not stay any permit condition.

[Auth. §**X**(C): 40 CFR 70.6(a)(6)(iii);]

XI RIGHT OF ENTRY

PERMITTEE shall allow the Air Pollution Control Officer, the Chairman of the California Air Resources Board, The Regional Administrator of EPA, and/or their authorized representatives, upon presentation of credentials, to do any of the following:

A. To enter upon the premises where the source is located, or in which any records are required to be kept under the terms and conditions of this permit; and

B. At reasonable times, to have access to and copy any records necessary for the determination of emissions of pollutants to the air or required to be kept under the terms and conditions of this permit; and

C. To inspect any equipment, operation, or subject in this permit; and

D. To sample emissions from the source.

[Auth. §**XI**: 40 CFR 70.6(c)(2); H&SC 41511; MCAQMD Regulation 5, Rule 5.610(e)]

XII PERMIT MODIFICATION {District}

An Authority to Construct application shall be obtained from the District prior to the modification or replacement of any equipment for which a Permit to Operate has been granted; and prior to the installation and operation of any equipment for which an Authority to Construct is required pursuant to the California Health and Safety Code, Section 42300.

[Auth. §**XII**: MCAQMD Regulation 1, Rule 200(a)]

XIII SEVERABILITY

The provisions of this permit are severable, and, should any provision of this permit be held invalid, the remainder of this Permit shall not be affected thereby.

[Auth. §**XIII**: 40 CFR 70.6(a)(5); H&SC 41511; MCAQMD Regulation 5, Rule 5.610(h)]

XIV PROHIBITIONS

A. Public Nuisance – PERMITTEE shall meet all requirements of District Regulation 1, Rule 400(a) **{District}**

[Auth. §**XIV**(A): H&SC 41700, MCAQMD Regulation 1, Rule 400(a)]

B. Visible Emissions – PERMITTEE shall meet all requirements of District Regulation 1, Rule 410) **{District}**

[Auth. §**XIV**(B): H&SC 41701, MCAQMD Regulation 1, Rule 410]

C. Fugitive Dust Emissions – PERMITTEE shall meet all requirements of District Regulation 1, Rule 430 **{District}**

[Auth. §**XIV**(C): MCAQMD Regulation 1, Rule 430]

D. Sulfur Oxide Emissions – PERMITTEE shall meet all requirements of District Regulation 1, Rule 440

[Auth. §**XIV**(D): MCAQMD Regulation 1, Rule 440]

E. Circumvention – PERMITTEE shall meet all requirements of District Regulation 1, Rule 410 **{District}**

[Auth. §**XIV**(E): MCAQMD Regulation 1, Rule 410]

F. Open Burning – PERMITTEE shall meet all requirements of District Regulation 2. **{District}**

[Auth. §**XIV**(F): MCAQMD Regulation 2]

G. Title VI, Stratospheric Ozone Protection – PERMITTEE shall meet all requirements of 40 CFR 82 Subpart F for the recycling and emissions reduction of ozone depleting substances.

[Auth. §**XIV**(G): Federal 40 CFR 70.2]

H. National Emissions Standard for Asbestos - PERMITTEE shall meet all requirements of District Regulation 1, Rule 492 during the demolition or renovation of any structure containing asbestos materials.

[Auth. §**XIV**(H): Federal 40 CFR 70.2, MCAQMD Regulation 1, Rule 492]

Chapter 2 - Facility Description

The Georgia-Pacific West Fort Bragg facility is a sawmill located on over 400 acres. The facility consists of the following major process areas: a sawmill, a planer, eleven lumber kilns, and the powerhouse. Redwood (50%), Douglas Fir (40%), and Hemlock Fir (10%) are the main types of raw logs processed at Fort Bragg. The mill is capable of operating 3 shifts per day, 365 days per year. Actual operating schedule varies with production requirements.

The sawmill is equipped with saws, edgers, trimmers, wood chippers, cyclones, target boxes, and a primary and secondary sorting operation.

The planing mill customizes the wood products to the customer specification. The equipment includes planing machines, saws, trimmers, chippers, and cyclones.

The powerhouse consists of three boilers equipped with multiclone and wet scrubbers. The steam generated in the powerhouse is used throughout the facility, including the lumber kilns. The boilers receive wood residuals from all processes at the facility.

I Sawmill

All raw logs handled in the sawmill are obtained from the log deck area. In the log deck area, logs are scaled for weight and length. Four front-end loaders unload logs from trucks and transport them to an area for sorting. Two cranes are also used in the log yard for sorting logs. The logs are sorted based on grain, size, and species. From the log deck area, logs are transported to the sawmill by front-end loader.

Log decks are loaded using front-end loaders. Transfer chains transport the logs to the debarkers. The sawmill contains two mechanical debarkers, north and south, that both operate full time. The bark from the debarking process is handled in the hammer hog. The pulverized bark from the hammer hog is conveyed to the fuel area.

From the debarker, the logs are transported via transfer chains to two cut-off saws. The wood pieces from the cut-off saws are pulverized in the hammer hog. The log is then transferred to two quad-saw headrigs. Both headrigs contain 6-foot band saws.

From the headrigs, the cants and sidecuts are transferred to edgers that cut the lumber to specified dimensions. All products from the edgers are transported to one of two trimmers. The trimming operation trims the lumber to proper size and diverts quality lumber to the sorting process or back to the resaw for resizing. An outside conveyor system transports the lumber to the resaw or the primary sorted.

The lumber is sorted by dimension or length by the primary sorters inside the building. The sorted lumber is transported by forklift to the asphalt storage area, planing mill, drying areas, or prepared for shipment. Lumber stored in the asphalt area is sorted in the secondary sorter by grade. After resorting, the lumber is handled as before except that it is not stored in the asphalt area.

The wood pieces generated in the mill are conveyed to the chipper. The shaker screen after the chipper separates the chips from the sawdust. The chips are blown to a target box above the chip bin.

II Planer Mill

The Planer plant consists of two machines: one machine is the planing machine and the dog-ear machine.

Lumber enters the planing machine and is then directed to a landing table where the lumber is visually inspected and marked. The lumber is then selected by grade and woodcut. From this point, the lumber is transported to the trimmer and then is sorted. Product is transferred by forklift to storage area for shipment.

Wood pieces from the trimmer are conveyed to the planer chipper, and the chips are blown to a target box located above the chip bin. Chips can be diverted and conveyed to fuel storage area. Shavings from the planer are processed through the cyclone and conveyed to the shavings bin. Shavings can be diverted and blown to the fuel storage area.

The dog-ear machine consists of a trimmer, a resaw, and a dog-ear saw. The lumber first goes through the trimmer to to cut the lumber to proper length. The lumber is then directed to the resaw, which resaws the lumber to the proper thickness. The lumber then is directed to the dog-ear saw, which cuts the dog-ear pattern. The lumber then is directed to a landing table where it is pulled into units. The product is then transported by forklift to storage area for shipment.

Wood pieces from the dog-ear trimmer are conveyed to the dog-ear chipper, and then the chips are blown to a target box above the conveyor to the fuel storage area.

III Lumber Kilns

Products from the sawmill may proceed to the drying areas. The area consists of lumber kilns, dry sheds, and specific locations for air-drying. There are 11 lumber kilns with 6 pre-dryers. Lumber is dried in the kilns using indirect steam heat, and drying times up to 6 weeks can occur. There are 5 dry sheds. Dry sheds are enclosed areas where lumber is typically stored before shipments or transfer to other mill locations. There are a number of air-drying yards around the facility. The south air-drying yard is the newest and largest air-drying yard located on the south side of log deck area. Lumber may be left to dry in an air-drying yard up to a year.

IV Powerhouse

There are three operating boilers at the Fort Bragg facility. The boilers produce steam and are fired with hog fuel, wood, and bark generated at the facility. Fuel oil is used as an alternative fuel source. Boiler #1 and #2 are of the "fixed grate" type where the fuel is burned on a grate that remains stationary at all times. Boiler #3 is of the "traveling grate" type where the fuel is dropped on a grate that constantly moves while the fuel is burning. Boiler #1 and #2 are capable of producing 105,000-lbs./hr. steam at 143 million BTU/hr. Boiler #3 generates 140,000lbs./hr. at 270 BTU/hr.

Fuel is stored in the fuel house (enclosed building) or in the beach area (west of the fuel house). Hogged fuel is transported from the fuel by a covered conveyor. Excess feed is conveyed back to the fuel house. From the conveyor, fuel drops through chutes and is introduced into the boilers by rotating screws that control the feed rate.

All three boilers are equipped with fly-ash reinjection and a multiclone followed by a wet scrubber. The flue gas from the boilers passes through multiclones where the ash is separated from the flue gas. The flue gas then passes through the wet scrubber before venting to atmosphere.

Chapter 3 – Equipment Lists

I. Process 1 - Sawmill Line

Equipment Item No.	Process Line No.	Equipment Identification
1	P1	Log deck area
2	P1	Debarkers (2)
3	P1	Hammer Hog
4	P1	Cut-off saws (2)
5	P1	Quad saws (2)
6	P1	Edgers (2)
7	P1	Trimmers (2)
8	P1	Resaw
9	P1	Sawmill sorters (2)
10	P1	Sawmill chipper
11	P1	Shaker screen
12	P1	Sawmill chip bin
13	P1	Air drying area
14	P1	Pre-dryers (6)
15	P1	Kilns (11)
16	**P1**	**Cyclone abating saw fillers – East (PERMIT No. 96-53)**
17	**P1**	**Cyclone abating saw fillers – West (PERMIT No. 96-54)**
18	P1	Target box for sawmill (not shown)
19	P1	Collection system for sawmill building fugitive abatement

II. Process 2 – Planing Mill Line

Equipment No.	Process Line No.	Equipment Identification
20	P2	Planer
21	P2	Landing/grading/trimmer deck
22	P2	Planing mill trimmer
23	P2	Planing mill sorter
24	P2	Planing mill chipper
25	P2	Planing mill shaker screen
26	P2	Planing mill chip bin
27	P2	Planing mill shavings bin
28	**P2**	**Cyclone abating planing mill (PERMIT No. 95-25)**
29	**P2**	**Shavings Bin Cyclone (PERMIT No. 85-29)**
30	P2	Target box for planing mill
31	P2	Collection system for planing mill building fugitive abatement

III. Process 3 – Fence Line

Equipment No.	Process Line No.	Equipment Identification
32	P3	Dog-ear trimmer
33	P3	Dog-ear saw
34	P3	Dog-ear resaw
35	P3	Bundling machine
36	P3	Fence Line chipper
37	P3	Fence Line shaking screen
38	**P3**	**Cyclone abating Fence Line (PERMIT No. 76-10)**
39	P3	Target box for Fence Line
40	P3	Collection system for Fence Line fugitive abatement

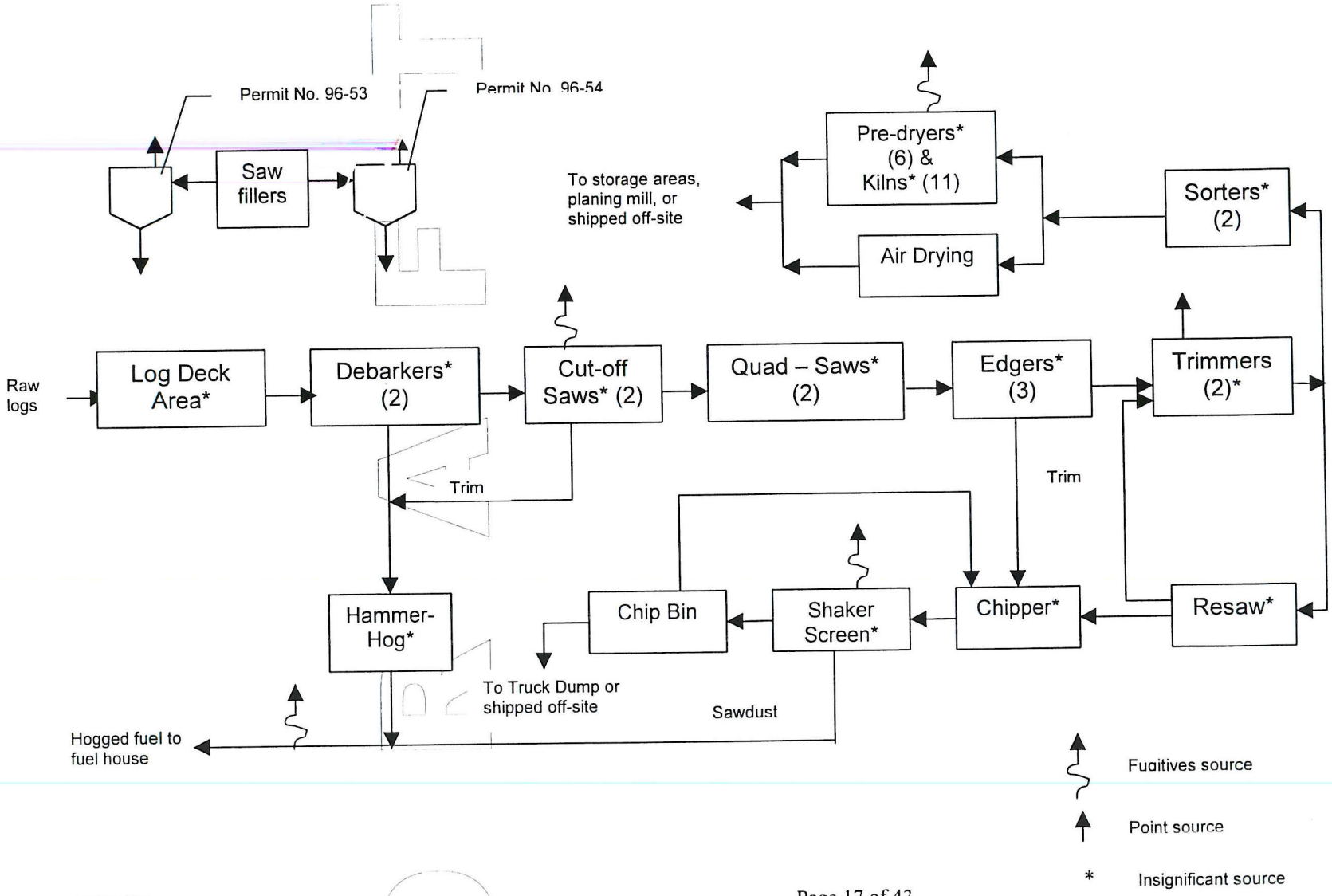
IV. Process 4 – Powerhouse Line

Equipment No.	Process Line No.	Equipment Identification
41	P4	Fuel house truck dump
42	P4	**Fuel House Cyclone (PERMIT No. 76-17)**
43	P4	Fuel house
44	P4	Fuel house beach storage piles
45	P4	Fuel house hammer hog
46	**P4**	**Wood stoker Boiler No. 1 (PERMIT No. 76-20)**
47	P4	Wet scrubber for Boiler No. 1
48	**P4**	**Wood stoker Boiler No. 2 (PERMIT No. 76-21)**
49	P4	Wet scrubber for Boiler No. 2
50	**P4**	**Wood stoker Boiler No. 3 (PERMIT No. 82-01)**
51	P4	Wet scrubber for Boiler No. 3
52	P4	Sand hopper

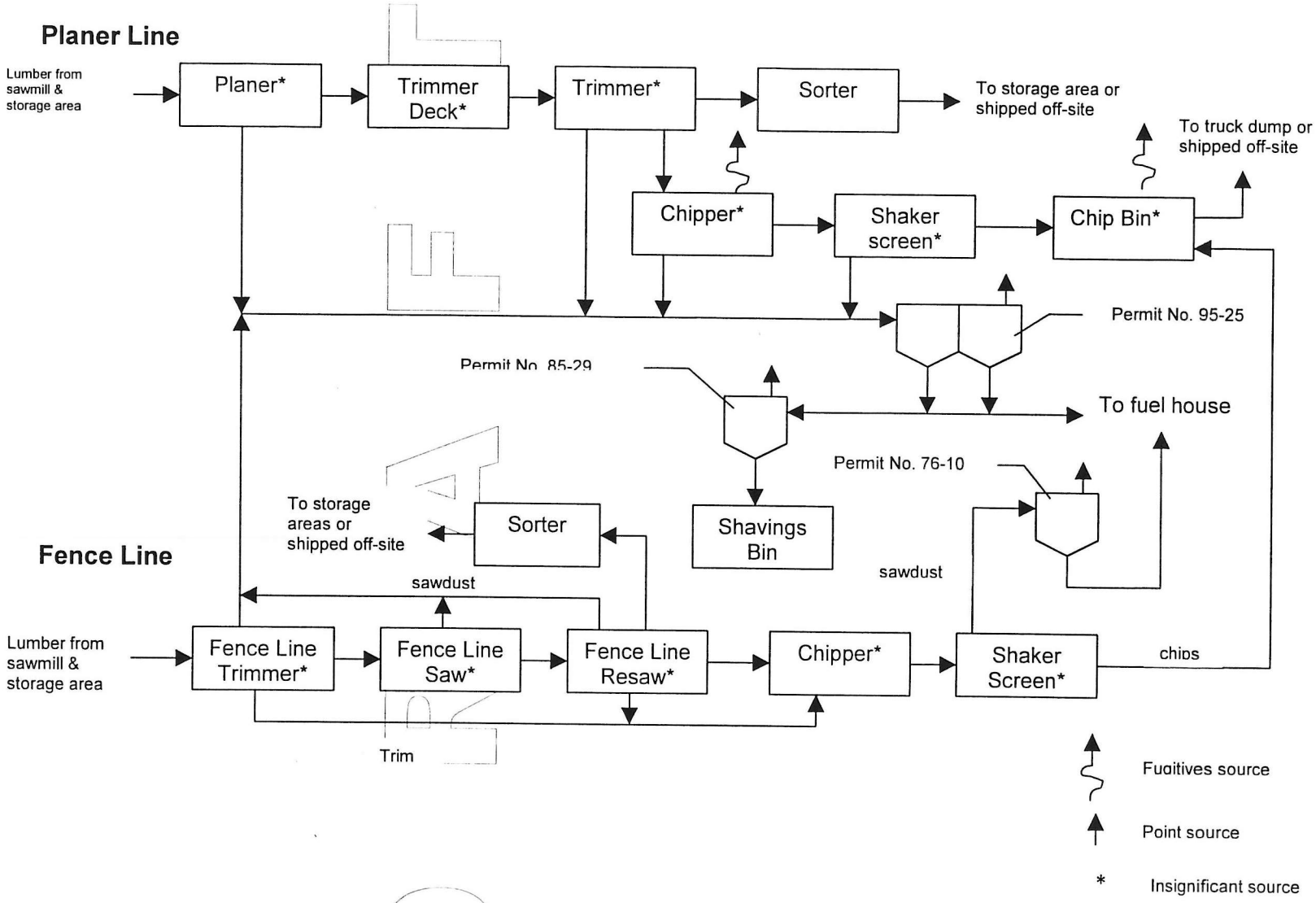
V. Facility Support Systems

Equipment No.	Process Line No.	Equipment Identification	Quantity
NA	P5	Roads (paved)	mi
NA	P5	Roads (unpaved)	mi
NA	P5	Stationary IC engines (gasoline)	
NA	P5	Stationary IC engines (diesel)	
NA	P5	Non-road vehicles (gasoline)	
NA	P5	Non-road vehicles (diesel)	
NA	P5	Non-road vehicles (NG)	
NA	P5	Fuel oil storage tanks	Gals
NA	P5	Diesel storage tanks	Gals
53	**P5**	**Gasoline storage tank (PERMIT No. 94-02)**	**12,000gals**
54	**P5**	**Vapor recovery system (PERMIT No. 94-02)**	
NA	P5	Cooling Tower	

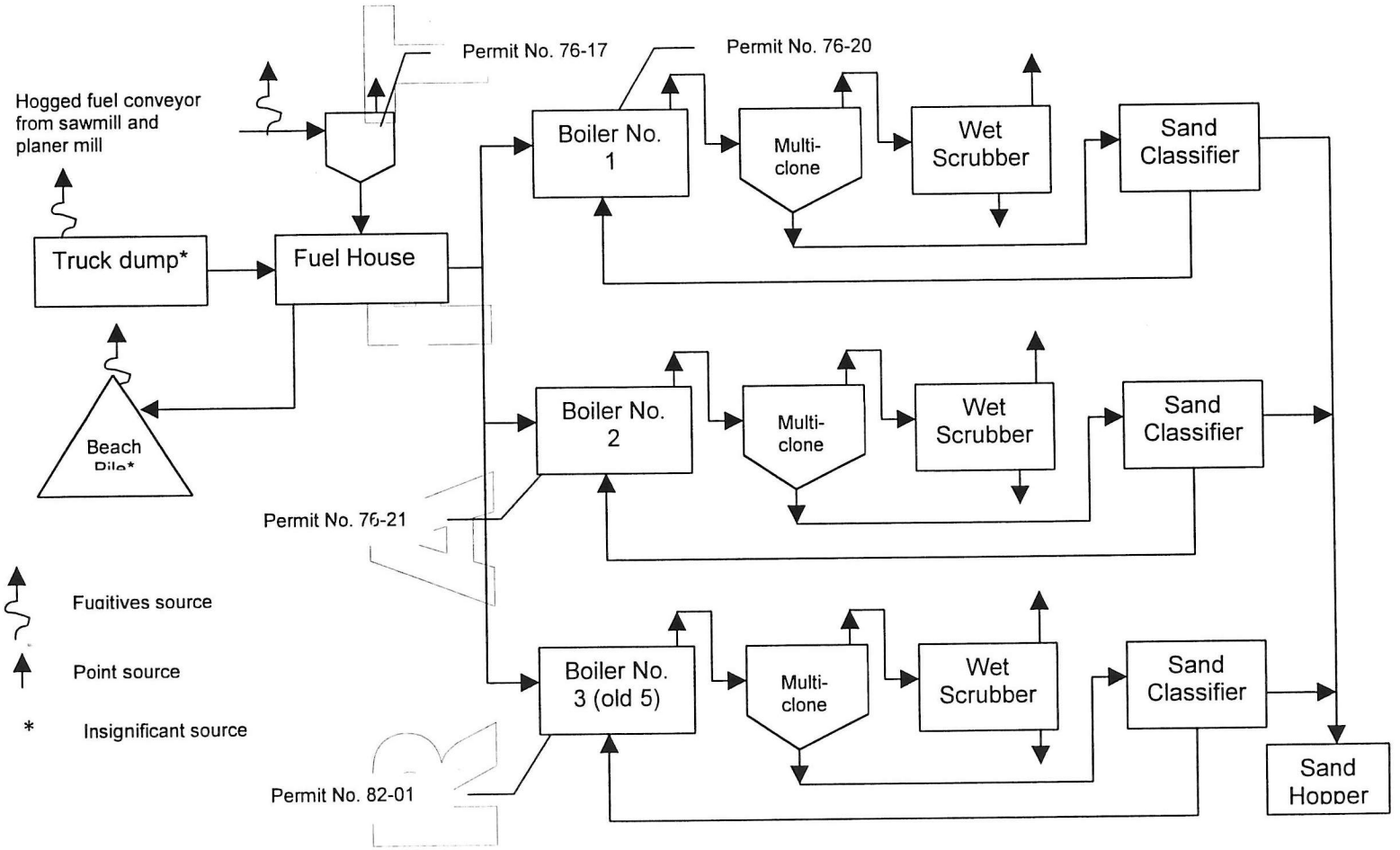
Process Flow Diagram
Georgia Pacific Fort Bragg Sawmill
Sawmill



Process Flow Diagram
Georgia Pacific Fort Bragg Sawmill
Planer Mill



Process Flow Diagram
Georgia Pacific Fort Bragg Sawmill
Power Generation



Chapter 4 – Equipment Specific Permit Conditions

I. Process 1 – Sawmill Line

A. Equipment Item No. 16 – East Cyclone with blower motor abating the saw fillers.

1. Basic Equipment

Abatement: Plant Schematic Permit No.96-53
Make:
Model:
Serial No:
Power source: Electricity
Design Rate: 15 hp
Comments:

2. Control Equipment

NA

3. Monitoring Equipment

None

4. Emissions Limitations **{District}**

a. Particulate Matter

i. Particulate loading

PERMITTEE shall not cause to be discharged particulate matter into the atmosphere in excess of 0.20 gr/dscf (0.46 grams per dry standard cubic meter) of exhaust gas.

ii. Visible emissions

PERMITTEE shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity for any period or periods aggregating more than 3 minutes in any one hour period.

b. Carbon Monoxide - NA

c. Nitrogen Oxides - NA

d. Sulfur oxides - NA

e. Hydrocarbons - NA

f. HAPs - NA

[Auth. §**I**(A)(4): MCAQMD Permit No. 0120-1-20-96-53]

5. Periodic monitoring

   a. Particulate Matter **{District}**

      i. Particulate loading

      PERMITTEE shall conduct performance testing for particulate material once per year. Particulate emissions shall be monitored using Oregon DEQ Method 8. If the compliance test result is less than one-half the permitted standard, then the District may waive the next year compliance test.

      ii. Visible emissions

      PERMITTEE shall conduct performance testing for visible emissions once per year. Visible emissions shall be monitored using EPA Method 9 or other EPA approved method.

   b. Carbon Monoxide - NA

   c. Nitrogen Oxides - NA

   d. Hydrocarbons - NA

   e. HAPs - NA

[Auth. §**I**(A)(5): MCAQMD Regulation 5, Rule 5.620]

6. Reporting and Record Keeping

   This permit imposes no specific record keeping or reporting requirements for this equipment item.

7. Operating Conditions **{District}**

   a. PERMITTEE shall operate and maintain the equipment according to manufacturer's specifications.

   b. Sawdust/wood shavings or other particulate material collected in the cyclone control device(s) shall be discharged only into closed containers. No container shall be filled beyond its capacity.

   c. PERMITTEE shall operate equipment with access covers and inspection hatches sealed. Containment bins and hopper doors shall be closed during operation to prevent fugitive emissions.

[Auth. §**I**(A)(7): MCAQMD Permit No. 0120-1-20-96-53]

B. Equipment Item No. 17 – West Cyclone with blower motor abating the saw fillers.

1. Basic Equipment

Abatement: Plant Schematic Permit No.96-54
Make:
Model:
Serial No:
Power source: Electricity
Design Rate: 15 hp
Comments:

2. Control Equipment

NA

3. Monitoring Equipment

None

4. Emissions Limitations **{District}**

a. Particulate Matter

iii. Particulate loading

PERMITTEE shall not cause to be discharged particulate matter into the atmosphere in excess of 0.20 gr/dscf (0.46 grams per dry standard cubic meter) of exhaust gas.

iv. Visible emissions

PERMITTEE shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity for any period or periods aggregating more than 3 minutes in any one hour period.

b. Carbon Monoxide - NA

c. Nitrogen Oxides - NA

d. Sulfur oxides – NA

e. Hydrocarbons – NA

f. HAPs - NA

[Auth. §**I**(B)(4): MCAQMD Permit No. 0120-1-20-96-54]

5. Periodic monitoring

   a. Particulate Matter **{District}**

      ii. Particulate loading

      PERMITTEE shall conduct performance testing for particulate material once per year. Particulate emissions shall be monitored using Oregon DEQ Method 8. If the compliance test result is less than one-half the permitted standard, then the District may waive the next year compliance test.

      ii. Visible emissions

      PERMITTEE shall conduct performance testing for visible emissions once per year. Visible emissions shall be monitored using EPA Method 9 or other EPA approved method.

   b. Carbon Monoxide - NA

   c. Nitrogen Oxides – NA

   d. Sulfur oxides - NA

   e. Hydrocarbons - NA

   f. HAPs - NA

[Auth. §**I**(B)(5): MCAQMD Regulation 5, Rule 5.620]

6. Reporting and Record Keeping

   This permit imposes no specific record keeping or reporting requirements for this equipment item.

7. Operating Conditions **{District}**

   g. PERMITTEE shall operate and maintain the equipment according to manufacturer's specifications.

   h. Sawdust/wood shavings or other particulate material collected in the cyclone control device(s) shall be discharged only into closed containers. No container shall be filled beyond its capacity.

   i. PERMITTEE shall operate equipment with access covers and inspection hatches sealed. Containment bins and hopper doors shall be closed during operation to prevent fugitive emissions.

[Auth. §**I**(B)(7): MCAQMD Permit No. 0120-1-20-96-54]

II. Process 2 – Planing Mill Line

A. Equipment Item No. 28 – Cyclone with blower motor abating Planing Mill and Fence Line equipment

1. Basic Equipment

   Abatement: Plant Schematic Permit No. 95-25
   Make:
   Model:
   Serial No:
   Power source: Electricity
   Design Rate: 20 hp
   Comments:

2. Control Equipment

   NA

3. Monitoring Equipment

   None

4. Emissions Limitations **{District}**

   a. Particulate Matter

      i. Particulate loading

      PERMITTEE shall not cause to be discharged particulate matter into the atmosphere in excess of 0.20 gr/dscf (0.46 grams per dry standard cubic meter) of exhaust gas.

      ii. Visible emissions

      PERMITTEE shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity for any period or periods aggregating more than 3 minutes in any one hour period.

   b. Carbon Monoxide - NA

   c. Nitrogen Oxides – NA

   d. Sulfur oxides - NA

   e. Hydrocarbons - NA

   f. HAPs - NA

[Auth. §II(A)(4): MCAQMD Permit No. 0120-1-20-95-25-7]

5. Periodic monitoring **{District}**

   a. Particulate Matter

      i. Particulate loading

      PERMITTEE shall conduct performance testing for particulate material once per year. Particulate emissions shall be monitored using Oregon DEQ Method 8. If the compliance test result is less than one-half the permitted standard, then the District may waive the next year compliance test.

      ci. Visible emissions

      PERMITTEE shall conduct performance testing for visible emissions once per year. Visible emissions shall be monitored using EPA Method 9 or other EPA approved method.

   b. Carbon Monoxide - NA

   c. Nitrogen Oxides - NA

   d. Sulfur oxides - NA

   e. Hydrocarbons - NA

   f. HAPs - NA

[Auth. §II(A)(5): MCAQMD Regulation 5, Rule 5.620]

6. Reporting and Record Keeping

   This permit imposes no specific record keeping or reporting requirements for this equipment item.

7. Operating Conditions **{District}**

   a. PERMITTEE shall operate and maintain the equipment according to manufacturer's specifications.

   b. Sawdust/wood shavings or other particulate material collected in the cyclone control device(s) shall be discharged only into closed containers. No container shall be filled beyond its capacity.

   c. PERMITTEE shall operate equipment with access covers and inspection hatches sealed. Containment bins and hopper doors shall be closed during operation to prevent fugitive emissions.

[Auth. §II (A)(7): MCAQMD Permit No. 0120-1-20-95-25-7]

B. Equipment Item No. 29 – Cyclone with blower motor abating the conveyor to the shavings bin.

1. Basic Equipment

Abatement:	Plant Schematic Permit No. 85-29
Make:	
Model:	
Serial No:	
Power source:	Electricity
Design Rate:	15 hp
Comments:	

2. Control Equipment

   NA

3. Monitoring Equipment

   None

4. Emissions Limitations **{District}**

   a. Particulate Matter

      v. Particulate loading

      PERMITTEE shall not cause to be discharged particulate matter into the atmosphere in excess of 0.20 gr/dscf (0.46 grams per dry standard cubic meter) of exhaust gas.

      vi. Visible emissions

      PERMITTEE shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity for any period or periods aggregating more than 3 minutes in any one hour period.

   b. Carbon Monoxide - NA

   d. Nitrogen Oxides – NA

   e. Sulfur oxides - NA

   f. Hydrocarbons - NA

   g. HAPs - NA

[Auth. §II(B)(4): MCAQMD Permit No. 0120-1-20-85-29]

5. Periodic monitoring

   a. Particulate Matter **{District}**

      i. Particulate loading

         PERMITTEE shall conduct performance testing for particulate material once per year. Particulate emissions shall be monitored using Oregon DEQ Method 8. If the compliance test result is less than one-half the permitted standard, then the District may waive the next year compliance test.

      ii. Visible emissions

         PERMITTEE shall conduct performance testing for visible emissions once per year. Visible emissions shall be monitored using EPA Method 9 or other EPA approved method.

   b. Carbon Monoxide - NA

   c. Nitrogen Oxides – NA

   d. Sulfur oxides - NA

   e. Hydrocarbons - NA

   f. HAPs - NA

[Auth. §II(B)(5): MCAQMD Regulation 5, Rule 5.620]

6. Reporting and Record Keeping

   This permit imposes no specific record keeping or reporting requirements for this equipment item.

7. Operating Conditions **{District}**

   a. PERMITTEE shall operate and maintain the equipment according to manufacturer's specifications.

   b. Sawdust/wood shavings or other particulate material collected in the cyclone control device(s) shall be discharged only into closed containers. No container shall be filled beyond its capacity.

   c. PERMITTEE shall operate equipment with access covers and inspection hatches sealed. Containment bins and hopper doors shall be closed during operation to prevent fugitive emissions.

[Auth. §II(B)(7): MCAQMD Permit No. 0120-1-20-76-10-2]

III. Process 3 – Fence Line

A. Equipment Item No. 38 – Cyclone with blower motor abating the Fence Line chipper and shaker screen

1. Basic Equipment

Abatement: Plant Schematic Permit No. 76-10
Make:
Model:
Serial No:
Power source: Electricity
Design Rate: 20 hp
Comments:

2. Control Equipment

NA

3. Monitoring Equipment

None

4. Emissions Limitations **{District}**

a. Particulate Matter

i. Particulate loading

PERMITTEE shall not discharge particulate matter into the atmosphere in excess of 0.20 gr/dscf (0.46 grams per dry standard cubic meter) of exhaust gas.

ii. Visible emissions

PERMITTEE shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity for any period or periods aggregating more than 3 minutes in any one hour period.

b. Carbon Monoxide - NA

d. Nitrogen Oxides – NA

e. Sulfur oxides

f. Hydrocarbons - NA

g. HAPs - NA

[Auth. §III(A)(4): MCAQMD Permit No. 0120-1-20-76-10]

5. Periodic monitoring **{District}**

   a. Particulate Matter

      i. Particulate loading

      PERMITTEE shall conduct performance testing for particulate material once per year. Particulate emissions shall be monitored using Oregon DEQ Method 8. If the compliance test result is less than one-half the permitted standard, then the District may waive the next year compliance test.

      ii. Visible emissions

      PERMITTEE shall conduct performance testing for visible emissions once per year. Visible emissions shall be monitored using EPA Method 9 or other EPA approved method.

   b. Carbon Monoxide - NA

   c. Nitrogen Oxides - NA

   d. Hydrocarbons - NA

   e. HAPs - NA

[Auth. §III(A)(5): MCAQMD Regulation 5, Rule 5.620]

6. Record Keeping and Reporting

   This permit imposes no specific record keeping or reporting requirements for this equipment item.

7. Operating Conditions **{District}**

   a. PERMITTEE shall operate and maintain the equipment according to manufacturer's specifications.

   b. Sawdust/wood shavings or other particulate material collected in the cyclone control device(s) shall be discharged only into closed containers. No container shall be filled beyond its capacity.

   c. PERMITTEE shall operate equipment with access covers and inspection hatches sealed. Containment bins and hopper doors shall be closed during operation to prevent fugitive emissions.

[Auth. §III(A)(7): MCAQMD Permit No. 0120-1-20-96-53-9]

IV. Process 4 – Powerhouse Line

A. Equipment Item No. 46 – Boiler No. 1

1. Basic equipment

Source:	Wood waste stoker steam boiler
Make:	Riley Stoker
Model:	
Serial No:	
Power source:	Wood bark, back-up oil
Design Rate:	143MMBtu/hr (wood bark rating)
Burner design:	Stoker, fixed grate
Comments:	Nominal flue gas characteristics: 160F; 57,279 SCFM; 39,504 DSCFM; 31% H2O; 14.7% CO2

2. Control Equipment

Flyash reinjection, multiclones, and wet scrubber (E38)

3. Monitoring Equipment

None

4. Emissions Limitations **{District}**

a. Particulate Matter

i. Particulate loading –

PERMITTEE shall not cause to be discharged particulate matter into the atmosphere in excess of 0.20 gr/scf (0.46 grams per standard cubic meter) of exhaust gas, calculated to 12 percent carbon dioxide (CO2). Compliance shall be determined using CARB Method 5.

[Auth §IV(A)(4)(a)(i): MCAQMD Regulation 1, Rule 420(b), MCAQMD Permit No. 0120-1-20-76-20-1]

ii. Visible emissions –

PERMITTEE shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. The opacity standard applies at all times except for periods of start-up, shutdown, and malfunction.

[Auth §IV(A)(4)(a)(ii): MCAQMD Regulation 1, Rule 410(b), MCAQMD Permit No. 0120-1-20-76-20-1]

b. Carbon Monoxide – NA

c. Nitrogen Oxides – NA

d. Sulfur Oxides – NA

e. Hydrocarbons – NA

f. HAPs – NA

5. Periodic monitoring

All periodic monitoring tests will be conducted at the maximum rated operating capacity of the unit. The following methods shall be used for determining compliance with the above emissions limitations.

b. Particulate Matter

i. Particulate loading –

PERMITTEE shall conduct performance testing for particulate material once per year. Particulate emissions shall be monitored using CARB Method 5. If the compliance test result is less than one-half the permitted standard, then the District may waive the next year compliance test.

ii. Visible emissions –

PERMITTEE shall conduct performance testing for visible emissions once per quarter. Visible emissions shall be monitored using EPA Method 9 or other EPA approved method.

b. Carbon Monoxide -

PERMITTEE shall conduct performance testing for carbon monoxide during each compliance test for particulate emissions. Carbon monoxide shall be monitored using EPA Method 10 or other EPA approved method. If the compliance test result is less than one-half the permitted standard, then the District may waive the next year compliance test.

c. Nitrogen Oxides -

PERMITTEE shall conduct performance testing for nitrogen oxides once per year. Nitrogen oxides shall be monitored using EPA Methods 7-7E or other EPA approved methods. If the compliance test result is less than one-half the permitted standard, then the District may waive the next year compliance test.

d. Sulfur Oxides

PERMITTEE shall determine fuel oil sulfur content

e. Hydrocarbons - NA

f. HAPs – NA

[Auth. §IV(A)(5): MCAQMD Regulation 5, Rule 5.620]

6. Record Keeping and Reporting

Boiler operation records shall be provided to the District on an annual basis and at such other times as deemed necessary. These records shall include:

a. Steam production for the boiler in pounds.

b. Wood waste fuel consumed, measured in bone dry tons.

c. Fuel oil consumed in U.S. gallons.

d. Sulfur content of each lot of fuel purchased.

[Auth. §IV (A)(6): MCAQMD Permit No. 0120-1-20-76-20-1]

7. Operating Conditions

a. PERMITTEE shall use only wood waste products (bark, chips, and sawdust) as primary fuel with standby use of fuel oil allowed only during periods of grate cleaning, main fuel feed failure, or other bonafide emergencies.

b. PERMITTEE shall report all equipment malfunctions or breakdowns to the District in accordance with Mendocino County Air Quality Management District Regulation 1, Rule 450.

[Auth. §IV (A)(7): MCAQMD Permit No. 0120-1-20-76-20-1]

B. Equipment Item No. 48 – Boiler No. 2

1. Basic Equipment

Source:	Wood waste stoker steam boiler
Make:	Riley Stoker
Model:	
Serial No:	
Power source:	Wood bark, back-up oil
Design Rate:	143MMBtu/hr (wood bark rating)
Burner design:	Stoker, fixed grate
Comments:	Nominal flue gas characteristics: 160F; 57,279 SCFM; 39,504 DSCFM; 31% H2O; 14.7% CO2

2. Control Equipment

   Flyash reinjection, multiclones, and wet scrubber (E40)

3. Monitoring Equipment

   None

4. Emissions Limitations **{District}**

   a. Particulate Matter

      i. Particulate loading

      PERMITTEE shall not cause to be discharged into the atmosphere particulate matter in excess of 0.20 gr/scf (0.46 grams per standard cubic meter) of exhaust gas, calculated to 12 percent carbon dioxide (CO2).). Compliance shall be determined using CARB Method 5.

      [Auth. §**IV**(B)(4)(a)(i): Federal 40 CFR 60.42(a)(1); MCAQMD Regulation 1, Rule 420(b), MCAQMD Permit No. 0120-1-21-76-21-1]

      ii. Visible emissions

      PERMITTEE shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. The opacity standard applies at all times except for periods of start-up, shutdown, and malfunction.

      [Auth. §**IV**(B)(4)(a)(ii): MCAQMD Regulation 1, Rule 410(b), MCAQMD Permit No. 0120-1-21-76-21-1]

   b. Carbon Monoxide - NA

   c. Nitrogen Oxides – NA

   d. Sulfur Oxides - NA

   e. Hydrocarbons - NA

   f. HAPs – NA

5. Periodic monitoring

   a. Particulate Matter

      i. Particulate loading

      PERMITTEE shall conduct performance testing for particulate material once per year. Particulate emissions shall be monitored using CARB Method 5. If the compliance test result is less than one-half the permitted standard, then the District may waive the next year compliance test.

      ii. Visible emissions

      PERMITTEE shall conduct performance testing for visible emissions once per quarter. Visible emissions shall be monitored using EPA Method 9 or other EPA approved method.

   b. Carbon Monoxide -

      PERMITTEE shall conduct performance testing for carbon monoxide during each compliance test for particulate emissions. If the compliance test result is less than one-half the permitted standard, then the District may waive the next year compliance test. Carbon monoxide shall be monitored using EPA Method 10 or other EPA approved method.

   c. Nitrogen Oxides -

      PERMITTEE shall conduct performance testing for nitrogen oxides once per year. Nitrogen oxides shall be monitored using EPA Methods 7-7E or other EPA approved methods. If the compliance test result is less than one-half the permitted standard, then the District may waive the next year compliance test.

   d. Sulfur Oxides

   e. Hydrocarbons - NA

   f. HAPs - NA

[Auth. §IV(B)(5): MCAQMD Regulation 5, Rule 5.620]

6. Record Keeping and Reporting

Boiler operation records shall be provided to the District on an annual basis and at such other times as deemed necessary. These records shall include:

   a. Steam production for the boiler in pounds.

   b. Wood waste fuel consumed, measured in bone dry tons.

   c. Fuel oil consumed in U.S. gallons.

   d. Sulfur content of each lot of fuel purchased.

[Auth § IV (B)(6): MCAQMD Permit No. 0120-1-20-76-21-1]

7. Operating Conditions

   a. PERMITTEE shall use only wood waste products (bark, chips, and sawdust) as primary fuel with standby use of fuel oil allowed only during periods of grate cleaning, main fuel feed failure, or other bonafide emergencies.

   b. PERMITTEE shall report all equipment malfunctions or breakdowns to the District in accordance with Mendocino County Air Quality Management District Regulation 1, Rule 450.

[Auth § IV (B)(7): MCAQMD Permit No. 0120-1-20-76-21-1]

C. Equipment Item No. 50 – Boiler No. 3

1. Basic Equipment

Source:	Wood waste stoker steam boiler with cinder reinjection
Make:	Riley Stoker
Model:	SAM 150
Serial No:	
Power source:	Wood bark, back-up oil
Design Rate:	270MMBtu/hr (wood bark rating)
Burner design:	Stoker, traveling grate
Comments:	20,000 lbs/hr rated steam capacity using hog fuel wood waste as fuel. Nominal flue gas characteristics: 144F, 76,300 SCFM, 59,000 DSCFM, 22.7% H2O, 10.4% CO2

2. Control Equipment

   Flyash reinjection, multiclones, and wet scrubber (E41)

3. Monitoring Equipment

   Steam production rates

4. Emissions Limitations

   a. Particulate Matter

      i. Particulate loading

      PERMITTEE shall not cause to be discharged into the atmosphere particulate matter in excess of 0.05 grains per dry standard cubic foot corrected to 12 percent carbon dioxide (CO_2) determined by CARB Method 5 front half (probe wash plus filter catch). PERMITTEE shall not cause to be discharged into the atmosphere particulate matter in excess of 0.1 grains per standard cubic foot corrected to 12 carbon dioxide (CO_2) determined by CARB Method 5 (total catch). The particulate standard applies at all times except for periods of start-up, shutdown, and malfunction.

      [Auth. §**IV**(C)(4)(a)(i): Federal 40 CFR 60.43b(c)(1), MCAQMD Permit No. 0120-1-20-82-01-1]

      ii. Particulate loading **{District}**

      PERMITTEE shall not cause to be discharged into the atmosphere particulate matter in excess of 21.0 lbs/hr (2 hour average) @ 98,000±5,000 pounds steam/hour operating rate.

      [Auth. §**IV**(C)(4)(a)(ii): MCAQMD Permit No. 0120-1-20-82-01-1]

iii. Visible emissions **{District}**

PERMITTEE shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. The opacity standard applies at all times except for periods of start-up, shutdown, and malfunction.

[Auth. §**IV**(C)(4)(a)(iv): Federal 40 CFR 60.43b(f), MCAQMD Regulation 1, rule 410(b)]

b. Carbon Monoxide - NA

c. Nitrogen Oxides – NA (Note: Limited by fuel use limits under §**IV**(C)(7)(b)(i) below.)

[Auth. §**IV**(C)(4)(c): Federal 40 CFR 60.44b(c)]

d. Sulfur Oxides – NA (Note: Limited by sulfur content limits on fuel and fuel use limits under §**IV**(C)(6)(c))

[Auth. §**IV**(C)(4)(d): Federal 40 CFR 60.44b(c)]

e. Hydrocarbons - NA

f. HAPs - NA

5. Monitoring for Compliance

a. Particulate loading

Particulate loading shall be monitored using EPA Method 5 or other EPA approved method. PERMITTEE shall conduct performance testing for particulate material once per year. If the compliance test result is less than one-half the permitted standard, then the District may waive the next year compliance test.

b. Particulate loading **{District}**

District requirements for particulate loading shall be monitored using CARB Method. PERMITTEE shall conduct performance testing for particulate material once per year. If the compliance test result is less than one-half the permitted standard, then the District may waive the next year compliance test.

c. Visible emissions

PERMITTEE shall conduct performance testing for visible emissions once per quarter. Visible emissions shall be monitored using EPA Method 9 or other EPA approved method.

d. Carbon monoxide

Carbon monoxide shall be monitored using EPA Method 10 or other EPA approved method. PERMITTEE shall conduct performance testing for carbon monoxide during each compliance test for particulate emissions. If the compliance test result is less than one-half the permitted standard, then the District may waive the next year compliance test.

e. Nitrogen Oxides

Nitrogen oxides shall be monitored using EPA Methods 7-7E or other EPA approved methods. PERMITTEE shall conduct performance testing for nitrogen oxides once per year. If the compliance test result is less than one-half the permitted standard, then the District may waive the next year compliance test.

[Auth. §IV(C)(5): MCAQMD Regulation 5, Rule 5.620]

6. Record Keeping and Reporting

a. Steam Production

PERMITTEE shall operate and maintain strip chart recorders or equivalent to record steam production rates.

[Auth § IV(C)(6)(a): MCAQMD Permit No. 0120-1-20-82-01-1]

b. Wet scrubber pressure drop

PERMITTEE shall record once daily in a permanent record the wet scrubber flange to flange operating pressure drop.

[Auth § IV(C)(6)(b): MCAQMD Permit No. 0120-1-20-82-01-1]

c. Fuel use

PERMITTEE shall maintain a permanent record of daily fuel usage that includes:

i. Wood waste fuel consumed, measured in bone dry tons.

ii. Fuel oil consumed in U.S. gallons.

iii. Length of time fuel oil consumed.

iv. Sulfur content of each lot of fuel purchased.

[Auth §IV(C)(6)(c): MCAQMD Permit No. 0120-1-20-82-01-1]

d. Reporting

All records required under this permit shall be available for periodic inspection by the Mendocino Air Quality Management District, the California Air Resources Board, and/or the U.S. Environmental Protection Agency.

[Auth § IV(C)(6)(d): MCAQMD Permit No. 0120-1-20-82-01-1]

7. Operating Conditions

a. Steam Production Limits

i. PERMITTEE shall not generate steam from the No. 3 Boiler in excess of 140,000 lbs/hr on a 24-hr average.

ii. PERMITTEE shall not generate steam from the No. 3 Boiler in excess of 98,000 lbs/hr on an annual average.

b. Fuel Limitations

i. PERMITTEE shall use only wood waste products (bark, chips, and sawdust) as primary fuel. Fuel oil may be used as a supplement for no more than 438 hrs/year.

ii. Fuel oil sulfur content shall not exceed 1.75% on a daily average basis nor 1.55% on an annual average basis, as determined by ASTM Method D115-68 or D129-64

[Auth § IV (C)(7): MCAQMD Permit No. 0120-1-20-82-01-1]

D. Equipment Item No. 42 - Cyclone abating conveyor to fuel house

1. Basic Equipment

Abatement: Plant Schematic Permit No. 76-17
Make:
Model:
Serial No:
Power source: Electricity
Design Rate: 20 hp
Comments:

2. Control Equipment

NA

3. Monitoring Equipment

None

4. Emissions Limitations **{District}**

a. Particulate Matter

i. Particulate loading

PERMITTEE shall not discharge particulate matter into the atmosphere in excess of 0.20 gr/dscf (0.46 grams per dry standard cubic meter) of exhaust gas.

ii. Visible emissions

PERMITTEE shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity for any period or periods aggregating more than 3 minutes in any one hour period.

b. Carbon Monoxide - NA

c. Nitrogen Oxides - NA

d. Hydrocarbons - NA

e. HAPs - NA

[Auth. §**IV**~~(D)~~(4): MCAQMD Permit No. 0120-1-20-76-10]

5. Periodic monitoring **{District}**

   a. Particulate Matter

      i. Particulate loading

      PERMITTEE shall conduct performance testing for particulate material once per year. Particulate emissions shall be monitored using Oregon DEQ Method 8. If the compliance test result is less than one-half the permitted standard, then the District may waive the next year compliance test.

      ii. Visible emissions

      PERMITTEE shall conduct performance testing for visible emissions once per year. Visible emissions shall be monitored using EPA Method 9 or other EPA approved method.

   b. Carbon Monoxide - NA

   c. Nitrogen Oxides - NA

   d. Sulfur oxides - NA

   e. Hydrocarbons - NA

   f. HAPs - NA

[Auth. §IV(D)(5): MCAQMD Regulation 5, Rule 5.620]

6. Record Keeping and Reporting

This permit imposes no specific record keeping or reporting requirements for this equipment item.

7. Operating Conditions **{District}**

   g. PERMITTEE shall operate and maintain the equipment according to manufacturer's specifications.

   h. Sawdust/wood shavings or other particulate material collected in the cyclone control device(s) shall be discharged only into closed containers. No container shall be filled beyond its capacity.

   i. PERMITTEE shall operate equipment with access covers and inspection hatches sealed. Containment bins and hopper doors shall be closed during operation to prevent fugitive emissions.

[Auth. §IV(D)(7): MCAQMD Permit No. 0120-1-20-96-53-9]

V. Plant Wide Special Conditions

A. Dust Mitigation Measures **{District}**

PERMITTEE shall at all times operate the plant, log yard or lumber yard, fuel house truck dump, fuel house beach storage pile area, and all supporting activities in such a manner as to minimize fugitive dust emissions and ensure compliance with Mendocino County Air Pollution Control District Regulation 1, Rule 430 (fugitive dust emissions). This requirement shall include but not be limited to:

1. The prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or by other means.
2. The application of asphalt, water, or suitable chemicals on dirt roads, material stockpiles, and other surfaces which can give rise to airborne dust.
3. The paving of roadways and their maintenance in a clean condition.
4. Limiting vehicle speed to not more than 10 mph in the immediate area of the plant.
5. The appointment and designation by name of a dust control officer. This person shall have the responsibility and requisite authority to ensure that plant operations, including control of fugitive dust emissions, are in compliance with District regulations at all times. PERMITTEE shall provide to the District in writing the name of the person appointed within thirty days of issuance of this permit, and thereafter upon change.

[Auth §V(A): MCAQMD Regulation 1, Rule 430, Permit No. 0120-1-20-76-10-2]

B. Fugitive Emissions Mitigation Measures **{District}**

PERMITTEE shall inspect all ductwork associated with fugitive dust collection systems for leaks once a month. Any leaks detected shall be repaired within ten days. Any visible accumulation of sawdust on exterior horizontal surfaces (except for storage piles) shall be removed within ten days of discovery.

[Auth §V(B): MCAQMD Regulation 1, Rule 430(a), Permit No. 0120-1-20-76-10-2]

C. Gasoline Storage Tank with Phase II Vapor Recovery **{District}**

PERMITTEE shall operate the gasoline storage and dispensing system in compliance with District Regulation 3, Rule 1.

[Auth §V(C): MCAQMD Regulation 3, Rule 1, Permit No. 0120-]

D. Cooling Tower

PERMITTEE shall insure that the cooling tower meets all requirements of District Regulation 3, Rule 3.

[Auth §V(D): H&SC §39662, MCAQMD Regulation 3, Rule 3]

E. Maintenance of dust collection systems

PERMITTEE shall maintain in good working order without leaks and operate according to manufacturer's specifications system collection devices (inlets), contaminant transport systems (duct work), air movers (blowers), instrumentation (controls), subsystems (sprays, valves), and material feed and containment systems (hoppers and bins).

[Auth. §**III**(B): MCAQMD Permit No. 0120-1-20-96-53-9 and others]

F. Risk Management Plan

PERMITTEE shall maintain a current Risk Management Plan (Hazardous Materials Business Plan) in accordance with Mendocino County

[Auth §**V**(F): 40 CFR 70]